

American Aviation

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Voice of
American Aeronautics

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Fortnightly Review

Just Waiting

THE tragedy of the past year in the U. S. has been the unused productive facilities of the aircraft manufacturing industry.

Even today, with air power the dominant force throughout the world and our own government talking in terms of scores of thousands of airplanes, the full productive capacity of the U. S. industry is not being utilized.

True, the orders are expected in the near future. Possibly some of them will be announced by the time this is read, but how costly is procrastination! How costly it has been for Great Britain to have dilly-dallied for months before making up its mind what planes it wanted from this country. And how costly it will be to this country if, within the next 12 months, there arises a dire need for fleets of long-range combat airplanes.

It has now been a month and a half since the President suddenly awakened to the need for airplanes. Yet the aircraft industry is waiting for the word to start building, waiting for the word to start construction of new plants and waiting for the word to order machinery and tools and materials.

Airplanes and engines cannot be built overnight despite the rosy predictions of automobile men about one thousand planes a day in six months. In any vast airplane building program it will be a year before the wheels are moving at full speed. And one wonders if, in 12 months, the need for planes will be half as great as it may be in the near future.

We wonder, too, if the lesson of Europe has been fully learned in this country. This is the lesson

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Patterson Urges Expansion of Air Transport for Defense

ARMY MAN IS NEW CAA ADMINISTRATOR

Col. Donald M. Connolly Succeeds
C. M. Hester in Civil Aeronautics Post

The new administrator of Civil Aeronautics is to be an Army man, Washington learned June 21. He is Col. Donald M. Connolly, a high-ranking officer in the U. S. Corps of Engineers, War Dept.

Unknown in aviation circles, Col. Connolly will assume his new post July 1. In order that he may retain active Army status a joint resolution must be passed in both houses of Congress and this was introduced in the Senate June 21. Following passage of this resolution the President will send Col. Connolly's name to the Senate for confirmation.

It was not unexpected that an Army man would get the administrator's post in view of national defense activity, but there has been no advance indication of who the appointee might be.

Col. Connolly succeeds Clinton M. Hester, who has resigned to go into private law practice. Under the reorganization of the Civil Aeronautics

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Engine Salesman



George Chapline

Vice-President of Wright Aeronautical Corp., Paterson, N. J., currently active in building aircraft engines for national defense. (Story on Page 22).

CAA is 'Bottleneck,' UAL President Says; Hinders Normal Growth

IN a strongly-worded statement, made at the request of AMERICAN AVIATION, W. A. Patterson, president of United Air Lines, on June 24 warned that the Civil Aeronautics Authority has become a "bottleneck" retarding not only the normal growth of air transport, but also a desirable speeding up of expansion for national defense.

Patterson, who has been a strong supporter of the Civil Aeronautics Act and who has on many occasions expressed his confidence in that law, pointed to the CAA's "record of procrastination" and charged that it has been "slow and inadequate" in promoting air transportation.

If the U. S. airlines, which are already wondering if they will be able to get new planes and engines, fail to do so because of Army and Navy pressure on manufacturers, the responsibility rests with the CAA for failure to function with reasonable speed so that orders could have been placed in 1938-39, Patterson said. The responsibility also will rest with that body if the airlines fail to provide fast transportation in any emergency which may arise, he added.

"Counting all of the transport aircraft owned by the domestic and international airline operators of the U. S. today, we have less than 7,000 passenger seats," he said.

"These 7,000 seats are inadequate today to meet the rapidly accelerating peace-time demand for air transportation by this nation numbering more than 130,000,000 people. We live in a territory extending more than 2,600 miles from coast to coast and about 1,300 miles in width. Transport aircraft can cover practically any distance within the borders of this country overnight, while our surface transportation requires three or four times as long. In view of world events we must face seriously the problem of contact and transportation between our frontiers. Fortunately it is one place where expansion for peace-time utility will serve a national defense need."

Troop Movements Cried

"The importance of air transport in military operations has been clearly demonstrated in Europe, where decisive troop movements have been accom-

Air Corps Expands Facilities to Produce 7,000 Pilots Yearly

A plan for the expansion of training facilities to provide for the production of Army Air Corps pilots at the rate of 7,000 per year, plus 3,600 bombardiers and navigators was announced June 14 by the War Dept.

Air Corps pilot training is now to be accomplished in four phases as follows: 10 weeks primary training at civilian flying schools, 10 weeks basic training, 10 weeks advanced training and five weeks specialized training in combat types.

Primary training continues to be conducted at the nine civilian flying schools, which will be materially expanded to care for increased classes, the War Dept. said. Basic, advanced and specialized training will be given at three Air Corps centers; Gulf Training Center, Randolph Field, Tex.; Southeast Training Center, Maxwell Field, Montgomery, Ala., and West Coast Training Center, Moffett Field,

Cal. Maxwell and Moffett are to be opened in September and October, respectively.

Each civilian school is to open a branch to accommodate additional students. The class which entered these schools on May 18 was increased from 396 to 466, and strength of following classes will be: June, 605; August, 900; September, 1,100; October, 1,234; November and thereafter, 1,292.

Students to 3 centers

Present classes at the existing training center at Randolph Field and those which entered in June will receive their advanced training at Kelly and Brooks Fields, and their specialized training with GHQ Air Force units. Subsequently, basic, advanced and specialized training will be conducted under the three training centers.

The class entering the civilian

(Turn to page 10, col. 4)

plished by air. No nation can wage war or defend itself today without a dependable transportation system, and air transport is increasingly important because the bombing of bridges, railways and highways will not retard it.

"The need of dependable transportation for defense was stressed by the Carnegie Peace Foundation in an economic study of the last war, from which I quote: 'If the transportation system is in time of peace a vital current along which flows the life blood of a nation's economic activities, even more vital and essential is it to a nation struggling for very existence in time of war.'

"It has been said that the German movement of officers, experts, men and materiel to both Norway and the Netherlands involved the use of air transport equipment estimated to have more than 15,000 seats, or more than double our total scheduled transport capacity. Neither the American patrons of the scheduled airlines, nor the operators of those airlines are satisfied with the small quota of 7,000 seats. It is high time that we face facts realistically and do something about it!

Growth Retarded

"I say here without hesitation that our own Civil Aeronautics Authority has become a 'bottleneck' retarding, not only the normal growth of air transport, but a desirable speeding up of air transport expansion for national defense. I am very sorry to have to say this, because I have been a strong supporter of the Civil Aeronautics Act and have entertained great hope for its successful administration. However, it is my opinion that in the field of promotion as well as the field of economic

Lodestars for Transcontinental Line



United Air Lines has purchased four of these Lockheed Lodestars for delivery starting in July at a unit cost of \$86,700. The new 14-passenger transports will supplement United's present fleet of 58 Douglas and Boeing planes.

regulation, the Authority has been slow and inadequate; wasting the time of air transport operating organizations, trained and ready to provide the expansion needed by commerce today and the air transport strength to make more impressive our program for defense.

"Should the time come when the scheduled airlines of the U. S. fail to provide in an emergency the volume of fast air transportation needed, may it be made clear that the reasons for failure will be found in the CAA's record of procrastination during 1938, 1939 and 1940. May it also be noted that the CAA's inclination to interpret narrowly the powers given by Congress to encourage and develop an air trans-

portation system in the interests of commerce, the postal service and the national defense, was a contributing cause.

"Should the airlines, because of Army and Navy pressure upon the manufacturers in 1940 and 1941, fail to get delivery of aircraft and engines needed for normal operation, it is my opinion that responsibility rests with the CAA for failure to function with reasonable speed so that plans ahead could have been made and orders placed in 1938 and 1939.

"It is not too late to encourage air transport operators to build for tomorrow and for national defense. We have much to contribute."

MIT to Expand Aviation Research

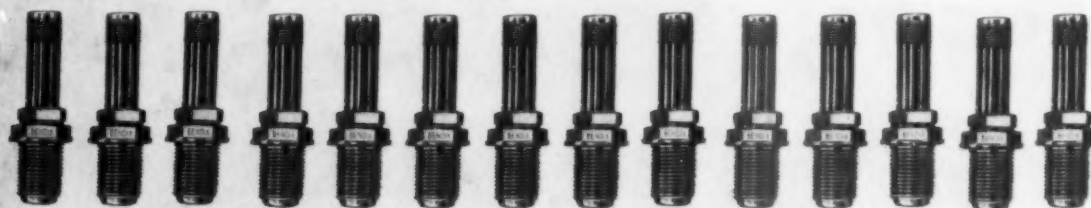
Construction of a large addition to the Massachusetts Institute of Technology's airplane engine laboratory to extend research for national defense has been made possible by a \$100,000 gift from Alfred P. Sloan, Jr., chairman of General Motors Corp. Disclosing plans for the new laboratory, Dr. Karl T. Compton, MIT president, stated that Sloan who in 1929 gave the institute its present automotive laboratory was prompted by desire to help MIT increase at once the effectiveness of its contribution to aircraft design and production.

"With war becoming so highly technical and mechanized," Dr. Compton suggested, "our contribution can be more significant than ever before in the training of technicians, in the selection of men for important technical or administrative posts and in the conduct of research and development projects.

"I cannot properly give details, but I can say that several of our staff have been loaned temporarily to the government; that various ones of us are in consultation every day on the preparedness program, and that provision has been made to prosecute several research development projects of importance."

Seek Funds

G. H. Ravelli of KLM, Royal Dutch Air Lines, is chairman of the aviation committee seeking funds for the Queen Wilhelmina Fund Inc., for the benefit of Holland refugees stranded in foreign lands following the invasion of The Netherlands by Germany. At least \$3,000,000 is being asked. In order that the money contributed will not fall into German hands it will be distributed through the American Red Cross and American Friends Service Committee.



Worthy of each other . . . and of the company they keep!

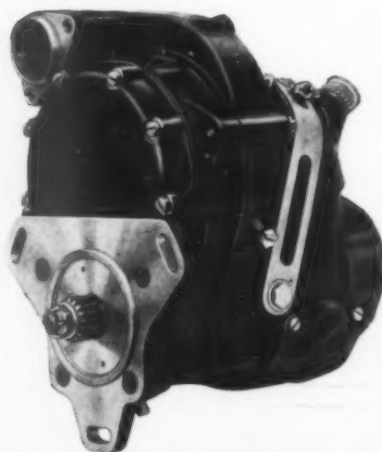
It seems hardly possible that mere force of habit could keep Bendix-Scintilla Aircraft Magneto in the high esteem of not only the United States Air Services, but all of the nation's commercial airlines. Certainly, outstanding merit, consistently maintained, is a much more logical explanation for such signal honors.

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LEDERER NAMED TO NACA SAFETY BUREAU

Heads Old Air Safety Board Unit
Under the Civil Aeronautics
Board

Jerome Lederer, since 1929 chief engineer for Aero Insurance Underwriters and an international authority on the subject of air safety, has been appointed director of the Safety Bureau of the Civil Aeronautics Board.

The new Safety Board takes over the functions of the Air Safety Board which becomes part of the Civil Aeronautics Board July 1 under the CAA reorganization. Lederer assumes the leadership of the safety unit held previously by Tom Hardin and C. B. Allen, whose offices as members of the Air Safety Board were abolished by the reorganization.

A native of New York City and a graduate of the college of engineering of New York University, Lederer received in 1924 the David Orr prize of that institution for excellence in professional subjects and after graduation remained as assistant in the department of aeronautical engineering, receiving his M.E. degree in 1925.

Following a visit to Europe on an engineering mission, Lederer took up work as an aeronautical engineer for the U. S. Air Mail Service where he was in charge, among other things, of investigating accidents and making changes in designs of air mail planes designed to improve their safety.

He joined Aero Insurance Underwriters a few years later and in 1929 was made chief engineer. His safety work has kept him in intimate contact with airline, charter and private flying.

He also was required to make estimates of risks connected with all types of flying operations and during 1939 the organization which he supervised consisted of 170 specially trained employees scattered over the U. S. and Canada who during the year carried out some 3,000 inspections of airplanes, hangars and airports insured by their company.

His well known news letter-safety bulletin has contributed much to improvement of aviation safety.

Lederer arrived in Washington June 24 for preliminary work preparatory to taking over the Bureau on July 1. Thomas O. Hardin, who retires as chairman of the Air Safety Board, will remain in Washington for a few weeks to assist Lederer in readjusting the organization of the Safety Bureau.

SPA Dates Set

Date for the annual meeting of the Sportsman Pilots Association at St. Jovite, P. Q., Canada, has been set for July 21. The organization's cruise to the Canadian resort will take place between the dates of July 19 and 26. Western wing of the cruise will rendezvous at Wayne County Airport, Detroit, on July 19, and the eastern wing will rendezvous at "Starhaven," Clemson Park, Middletown, N. Y., on the same day.

Cleveland Tour July 26-28

The third annual air tour of the Cleveland Junior Chamber of Commerce is scheduled for July 26-28 and will visit the cities of Toledo, Lima, Alliance, Findlay, Portsmouth, Athens, Mansfield, Columbus, New Philadelphia, Akron and Canton.

Du Bouchet Gets Degree

A. J. du Bouchet, Jr., assistant secretary of North American Aviation Inc. and assistant to the secretary of General Motors Corp., in mid-June received the degree of Bachelor of Laws from Fordham University. He formerly was secretary to Paul H. Brattain, vice-president-traffic, of Eastern Air Lines.

Calendar

- June 29-July 14—11th Annual National Gliding & Soaring Contest, Elmira, N. Y.
- July 4-6—Air Show, Municipal Airport, Denver, Colo.
- July 6-7—Ninety Nines Annual Convention, Brown Palace Hotel, Denver, Colo.
- July 7—3rd Annual Air Races & Air Classic, Kalamazoo, Mich.
- July 7-9—1st National Air Congress & NAA Convention, Brown Palace Hotel, Denver, Colo.
- July 13—National Airplane Trading Day, Lovell Field, Chattanooga, Tenn.
- July 14—All-Dixie Air Show, Lovell Field, Chattanooga, Tenn.
- July 15-17—Air Transport Association's Engineering & Maintenance Conference, Hotel St. Paul, St. Paul, Minn.
- July 20-26—Summer Cruise & Annual Meeting of Sportsman Pilots Association, St. Jovite, P. Q., Canada.
- July 21—5th Annual Air Show, Ft. Wayne, Ind.
- July 26-28—3rd Annual Air Tour of the Cleveland, O., Junior Chamber of Commerce.
- July 26-28—Aquaticennial Air Show, Wold-Chamberlain Field, Minneapolis, Minn.
- Aug. 1—Opening Ceremonies for Love Field's New Administration Building, Dallas, Tex.
- Aug. 4—Dedication of Coast Guard Air Station, Elizabeth City, N. C.
- Aug. 11-17—4th Annual Wisconsin NAA Air Tour.
- Aug. 18-19—Air Show Sponsored by Sheldon Chapter of NAA, Roscoe Turner Field, Sheldon, Ia.
- Sept. 3-6—American Society of Mechanical Engineers, Fall Meeting, Spokane, Wash.
- October—Air Line Pilots Association, Annual Convention, Chicago, Ill.
- Oct. 7—Air Line Mechanics Association, Annual Convention, Chicago, Ill.
- Oct. 7-11—National Safety Congress & Exposition, Stevens Hotel, Chicago, Ill.
- Oct. 17-19—NASAO's Annual Convention, Louisville, Ky.
- Oct. 31-Nov. 1-2—National Aircraft Production Meeting & Engineering Display of SAE, Hotel Biltmore, Los Angeles, Cal.
- Dec. 17—Wright Brothers Lecture for 1940, by Dr. Sverre Pettersen.

WILSON SELECTED

TWA Board Chairman Heads Airline Committee to Work With Government

T. B. Wilson, chairman of the board of TWA, has been named chairman of a committee of airline executives selected in Washington to develop a program of cooperation between airlines and the government.

Magazine Changing Name

"Popular Aviation," beginning with its August issue, will add the name "Flying" to its masthead and the publication will then appear as "Flying and Popular Aviation." The name "Popular Aviation" gradually will be dropped in subsequent issues, leaving "Flying" as the sole name of the magazine. Publisher is Ziff-Davis Publishing Co., Chicago.

Dayton C of C Sets Up Dept.

C. Palmer Boyles, formerly associated with Lear Aviation Inc., has been appointed director of aviation in charge of the newly formed aviation department of the Dayton (O.) Chamber of Commerce, according to Paul W. Williams, managing director.

Resigns CAA Post



Clinton M. Hester
Who retires from 22 years in Government service to enter private law practice.

4 WIN SCHOLARSHIPS

National Committee of Award Selects Students for United Air Lines Honor

Winners of four United Air Lines scholarships to Boeing School of Aeronautics have been announced by the national committee of award which met at Oakland, Cal., to evaluate treatises sent in by undergraduate students attending junior colleges, colleges and universities in all parts of the U. S. Award winners are:

Ian Murray Williamson of Ottawa, Ont., a student at the University of Toronto; B. Furman Wilkes of Nashville, Tenn., a student at Vanderbilt University; David Dalziel of Boston, Mass., a cadet at the U. S. Military Academy at West Point; Seymour F. Bernstein of New York, N. Y., a student at the City College of New York.

The winners will have their choice of six courses at Boeing school, plus 30 hours of flight instruction, including 10 hours of Link trainer time.

The award committee was composed of Dr. Baldwin M. Woods, chairman of the mechanical engineering department of the University of California; William B. Stout, president of Stout Laboratories, Dearborn, Mich.; Leslie A. Walker, CAA, Washington, D. C. and O. C. Richardson, assistant to the vice president in charge of operations, western division, United Air Lines.

ATA Conference July 15-17

The summer Engineering and Maintenance Conference of the Air Transport Association will be held at the Hotel St. Paul, St. Paul, Minn., July 15-17. The purchasing committee of the ATA will meet on July 18.

To Control Aero Purchases

Montreal, Que.—T. C. L. Westbrook has been appointed by Lord Beaverbrook, British minister of aircraft production, to take over control of aircraft purchases from the U. S. and Canada.

Misdirected War Effort

Drastic changes in production plans of Canadian Associated Aircraft Ltd. are expected to be made shortly with a switch over from British to American-type planes. The company, comprised of six major Canadian aircraft makers, has yet to produce a plane despite the fact that large scale production on approximately \$50,000,000 worth of orders was scheduled for some time ago.

Principal hitch in the plans was the inability of British manufacturers to send required parts and suitable materials to Canada. Unconfirmed reports say that certain modifications in original plans were made on the Stirlings and Hampdon bombers and some of the manufacturers forming Canadian Associated produced parts based on original plans, while others changed them.

Firms comprising the company are Canadian Car & Foundry, Canadian Vickers, Fairchild Aircraft, Fleet Aircraft, National Steel Car and Ottawa Car & Aircraft.

HESTER RESIGNS AS ADMINISTRATOR

Goes Into Private Law Practice July 1 From CAA Post

Clinton M. Hester, administrator of the Civil Aeronautics Authority since the creation of that agency in 1938, resigned his post in mid-June effective July 1 to enter private law practice in Washington, D. C.

The effective date of resignation coincided with the transfer of the administrator's function from the independent Authority to the Dept. of Commerce.

Now 45 years of age, Hester has served for 22 years in seven government agencies. He was the administrator's legislative draftsman for the Civil Aeronautics Act in 1938.

Although born in Iowa, he considers Missoula, Mont., as his home. He began his government service in 1919 with the Emergency Fleet Corporation, later serving in the Interior Dept., Shipping Board, alien property custodian's office, and the Justice Dept. where he was a chief attorney for a number of years. In 1934 he was appointed assistant general counsel in the Treasury Dept., which post he held until his appointment as CAA administrator.

He holds an LL.B. degree from Georgetown University and an A.B. degree from George Washington University. He served overseas in the first World War. He has a wife and a daughter. He expects to take a vacation in July and enter law practice late in the summer.

Edmund Allen Named to NACA Committee

Edmund Allen, director of flight and research of Boeing Aircraft Co., has been appointed to the committee on aerodynamics of the National Advisory Committee for Aeronautics. His commission, running through 1940, was signed by Dr. Vannevar Bush, NACA chairman, and head of the new National Defense Research Committee.

Other members of the national research committee are Secretary of War, Secretary of Navy, Dr. J. B. Conant, president of Harvard University; Dr. Richard C. Tolman, California Institute of Technology; Dr. Karl Compton, president, Massachusetts Institute of Technology; Conway P. Coe, commissioner of patents; Dr. Lyman J. Briggs, director, National Bureau of Standards, and Dr. F. B. Joutet, president of the National Academy of Sciences.

Michigan Football Team Will Fly United Air Lines

Forty-five players of the University of Michigan football team will fly in three United Air Lines planes to the Pacific coast for a game with the University of California at Berkeley on Sept. 27. The round-trip charter, it was said, will be the largest movement of an athletic team in airline history. Contract with United was signed by Fritz Cralier, Michigan athletic director.

Charter Trips Gain

Special charter trips have become an unexpected new source of revenue to the airlines, according to B. B. Gragg, sales manager of United Air Lines, who said more charter trips have been flown in the last two months than in the entire year of 1939. Athletic teams, groups of salesmen, convention parties and company executives making territorial tours are responsible, Gragg said.

U. S. Aviation Underwriters Reveals New Insurance Plan

U. S. Aviation Underwriters, New York, N. Y., has announced that "all of the markets for aviation insurance are working closely with CAA officials in planning satisfactory rates, coverages and handling procedure (in the coming training program) . . . Services and facilities of underwriters will be closely coordinated. Rates and coverages will be uniform . . . It is believed that in order to provide the best possible service in the handling of this insurance program a special office will be opened in Washington to serve as a centralized bureau in behalf of all underwriters."

Under the original program each student was provided with a special policy, \$3,000 principal, with \$14 premium. Each flight operator carried public liability of \$50,000 to \$100,000, and property damage limit of \$5,000, at a premium of \$12.75 for each student. The accident rate has been reduced from \$14 to \$10 and liability rate from \$12.75 to \$8, the company stated.

Casey Jones Suggests Development of South American Markets During War

The South and Central American countries present extraordinary possibilities for aviation, and present sentiment is ripe for cultivating this business, C. S. "Casey" Jones, president of Casey Jones School of Aeronautics, told the National Aviation Forum recently.

Tremendous competition for commercial and other advantages will have to be met when the war is over, and anything done now "will pay excellent dividends on both sides, commercially and

from the viewpoint of mutual defense," Jones said.

He made five recommendations on the South American situation: (1) establishment of aviation missions in every South and Central American country; (2) sending of additional South American pilots to U. S. government flying schools at little or no expense to them or their governments; (3) in selling equipment to these countries, great care should be taken what is best suited to their needs and at a fair price; (4) even though this present business is small, provision should be made to handle it with diligence, and (5) more of the "high-ups" from this country should visit South America.

In connection with the sending of additional South American pilots to U. S. schools, Jones stated "if our own government can find no way to finance this I am wondering if it would not be good business for the aircraft manufacturers through the Aeronautical Chamber of Commerce to sponsor such a program and provide a fund for carrying this out."

On his third recommendation, Jones said that "in selling equipment to these countries, great care should be exercised in selling them what is best suited to their needs and at a fair price. There have been numerous instances where unsuitable equipment, and by that I do not mean unsafe equipment, has been sold. Planes that are too tricky for their use in their stage of progress, planes unsuitable for use at altitudes, used and reconditioned planes sold as new ones. The result has been the death of many pilots and a wave of resentment against the seller. Prices too have been jacked up and this raises the bothersome question of agents."

"Most countries prefer to deal directly with the manufacturers, believing that they can save money. The manufacturers prefer this, thinking they can save money. Theoretically, everyone is happy but it doesn't always work out . . . One solution would be a fixed published export price slightly above domestic price to take care of agents or the additional service and sales expense bound to occur when dealing direct."

Jones said "several cases have come to my attention where American manufacturers have dismissed inquiries because they were too small and because they were too busy. This appears like a very short-sighted policy."

Love Field Building Ready Aug. 1



Dallas, Tex., on Aug. 1 expects to dedicate this new administration building at Love Field at which time the \$210,000 structure will be fully occupied. The drawing, by Flint & Broad, Dallas architects, shows the control tower framed in steel, the frame being bolted together so that it may be disassembled and reassembled on top of a future third floor. Structure will be approximately 60 by 260 ft., the central

portion, about 60 ft., paralleling Lemon Ave.

Thomas D. Broad, of the architectural firm, and Charles Hanst, manager of Love Field, visited many airports in drawing up plans for the Dallas building. It was observed that a common fault at many airports was lack of provisions for persons in the building to view operations on the field. Because of this, large bay windows were generously included in plans for the Love Field building.

Lockheed Study Published

Following a tabulation of answers to a questionnaire sent to 1,000 pilots, maintenance men, airline operators and others, Lockheed Aircraft Corp., Burbank, Cal., has published a 26-page booklet entitled "If You Were to Build Your Own Ship—". The study, undertaken by Lockheed's market research division, was summarized in AMERICAN AVIATION for Mar. 15. Copies of the handbook are available from Lockheed. The company's market research division has indicated that additional questionnaires will follow.

Navy Overhauls Lighter-Than-Air Policy; Rosendahl Urges Action

For the first time since 1933, the Navy Dept. has overhauled and modernized its policy in regard to both the construction and maintenance of rigid and non-rigid airships.

The June 20 announcement followed by three weeks a speech by Comdr. C. E. Rosendahl, Navy expert on lighter-than-air, in which he urged the U. S. to build up its rigid and non-rigid airships. He also pointed out that there was no definite U. S. airship policy.

The new Navy policy is (1) "to build and maintain non-rigid airships as required for coastal patrol and for other naval uses," and (2) "to build and maintain rigid airships as necessary to explore and develop their usefulness for naval purposes; and to cooperate with other agencies in developing commercial airships."

This policy supersedes the one adopted on May 10, 1933, which was (1) "to build only such non-rigid airships as may be necessary for training purposes," and (2) "to maintain as necessary the rigid airships now built or building to determine their usefulness for naval and other governmental purposes, and their commercial value."

Observers point out that the new policy covers a wider field, using both the words "build and maintain" and allowing cooperation with other



Rosendahl

FRIZZELL RESIGNS

Thomas G. Early Will Succeed CAA Secretary; High-Salaried Post Eliminated

Paul J. Frizzell has resigned as secretary of the Civil Aeronautics Authority, effective when the reorganization takes place July 1. Thomas G. Early, who has served as administrative assistant to Col. W. Sumpter Smith, chairman of the interdepartmental commission in charge of construction of Washington National Airport, has been made consultant to the Civil Aeronautics Board and designated as acting secretary.

Early is a native of North Dakota, graduate of Yale University, and holds a masters degree of economics from the University of Pittsburgh. For two years he was with the National Recovery Administration in Washington and later was advertising manager for Sharples Specialty Co., Philadelphia.

The post which Frizzell held carried a \$9,000 annual salary. With the splitting up of the Authority the need for a secretary at that salary became apparent. Early, who has been on a \$2,900 salary, will receive \$4,600 in his new post.

Wightman With Erco

Henry M. Wightman, former editor of "Soaring," official publication of the Soaring Society of America, is now connected with the propeller testing department of Engineering & Research Corp., Riverdale, Md. He joined Erco after preparing a manual on gliders and sailplanes for the aircraft worthiness section of the Civil Aeronautics Authority.

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WASHINGTON, D. C.

Barrage Over Hollywood



Motion picture companies located near California aircraft concerns are using barrage balloons made by Goodyear Tire & Rubber Co. to warn pilots that sound shots are being made. Testing of planes on a 24-hour basis had resulted in costly interruption of production schedules of the picture companies. Dorothy Harris is shown holding cables of the barrage balloon used on the 20th Century-Fox lot. (AMERICAN AVIATION, June 1).

New Plane Detector
Reported by Army

A supersensitive airplane detector which gives defending fighters a 15-minute warning of approaching aircraft is reported perfected by the Army for a chain of coastal lookout stations. Described by Brig. Gen. George V. Strong as "apparently far in advance of any similar equipment available to any of the belligerents abroad," the device reputedly picks up waves at distances of 50 miles or more. The detector has been in development at the Signal Corps laboratory, Fort Monmouth, N. J., for more than two years.

Costing \$54,700 each, 40 detectors are sought at the outset by the Army which would install them in six warning stations on the Atlantic Coast, one on the Gulf, three on the Pacific and others in Hawaii, Alaska, Puerto Rico and the Canal Zone. In addition, four mobile companies would be equipped to establish five stations wherever they might be needed on short notice.

Germany May Become Center of Large
Air Mail System; Had 45,000 Miles in 1938

If Germany retains control of countries it has invaded to date, she will have one of the largest air mail systems in the world. It is indicated in the annual report of the German Post Office which appears in the Apr. 1940 issue of "The Postal Union," official magazine of the International Bureau of the Universal Postal Union published at Berne, Switzerland. The report gives a picture of German pre-war air mail operations.

In the summer of 1938, Germany had 104 lines with a total length of 45,000 miles in operation—a much greater total than has been generally ascribed to that country. This includes all internal services as well as those operated in other countries by Deutsche Lufthansa, in addition to the services operated by the Condor Syndicate at Rio de Janeiro and the German air mail line Berlin-Santiago, Chile.

As the military situation developed the number of lines declined to 86 by Nov. 1938, and 76 by Mar. 1939. For the entire fiscal year ended Mar. 31, 1939, a total of 13,375,000 miles were

flown and 1,361 tons of mail were carried. (Domestic airlines of the U. S. carried over 12,000 tons for the fiscal year ended June 30, 1939).

Within the continent of Europe, all letters, postcards, and money orders were sent by air whenever earlier delivery could be obtained by so doing. As a result more than half of the letter mail was carried without surcharge.

Air surcharges for mail for the interior of the country and for other European countries were lowered in the summer of 1938, and those for parcels and newspapers were lowered in Feb. 1939. When Austria and the Sudetenland were taken over, the lower German rates and the full German service by air were established in those territories.

To what extent the air mail service will be expanded is now a question; Washington observers believe Germany will expand its air services with low mail rates as an aid to German business and foreign trade in competition with other countries.

Real Test of Air Power is Ability
to Produce, Howard Mingos Asserts

As far as can be learned from anything brought to light in Europe, American fighting planes and personnel are the equals of comparable forces in the war areas, and in some respects are superior to them, according to Howard Mingos, editor of the *Aircraft Year Book for 1940*, just published by the Aeronautical Chamber of Commerce.

The chief factor in modern warfare, he points out, "is to have defense aviation capable of expansion into as large a force as any emergency may demand. Superiority of flying equipment, marked superiority in certain types, is not enough. To be effective, it must be superior to the enemy machines right up to the end of war. The U. S. has every opportunity to maintain that superiority in any emergency.

"Capacity to produce combat and transport planes in sufficient numbers to meet all requirements of original supply and war attrition, throughout any emergency is the mainstay of real air power; and the aircraft industry of the United States has that capacity. The industry has access to all necessary raw and fabricated materials, and

all the accessories, to render it capable of mass production without precedent.

"All this aviation, much of it decisively important to our economic system and the future position of the nation in world affairs, is the third arm of our national defense. Nowhere outside the U. S. have the three arms received comparable attention by the same people.

"Unlike England, we have not neglected our army and air force while maintaining a strong navy. Unlike France, we have not neglected our air force and navy while developing a strong army. Unlike Germany we have not been forced to curb the size of our navy while building up a strong army and air force. We have all three under comparable stages of development, bearing in mind the fact that a navy must be built up in peacetime to be of service in war. Both Italy and Japan lay claim to such three-way defense systems; but they are not strong in air power because they lack the material resources which determine productive capacity."

KEEPING
AHEAD

It is fundamental in United Air Lines to anticipate the air travel needs of the communities it serves with faster, more frequent schedules, and higher standards of Mainliner service.

This summer, for example, United is flying 35% more plane miles and 47% more seat-miles than at the same time last year. Substantial increases have been made in frequency of service: for instance, between San Francisco and Los Angeles, 12 daily round-trips; between Portland and Seattle, 7 1-hour commuter flights.

United is providing more frequent commuter service between these Pacific Coast cities than is operated between any other cities in the world of comparable size.



UNITED
AIR  LINES

News in Pictures



Maj. Jack Berry, manager of Cleveland Airport, and Mrs. Berry are pictured celebrating their 20th wedding anniversary at a dinner party in the Ice Terrace Room of the Hotel New Yorker.



American Airlines officially opened a new office recently in St. Louis at 407 N. 12th Blvd., with Maj. James H. Doolittle performing the opening ceremony by walking through a paper door with Stewardess Rose Vojack of the line's Chicago base.



Detroit's No. 1 airline commuter, D. A. Unger, president of Process Lithograph Co., is shown buying the first book of airline commuter tickets of Pennsylvania-Central Airlines from Fred Distel, transportation manager of the Book-Cadillac Hotel. The tickets are good on any of the 26 daily commuter flights between Detroit and Cleveland on PCA.



Spark plug executives traveling with American Airlines to their annual west coast sales convention, shown upon arrival at Burbank, are, left to right: L. B. Murphy, assistant sales manager; F. A. Nealon, sales manager; R. E. Cave, sales supervisor, and Todd Reed, account executive of Ruthrauff & Ryan Inc. The executives made a nation-wide tour to promote sales for Electric Auto-Lite Co.



Lloyd Spainhower, official company photographer of Chicago & Southern Air Lines, is completing training in his newly purchased Aerona powered by a Continental Red Seal engine. Photo shows Spainhower with Chicago & Southern's maintenance inspector, Charles Feuchter, at the completion of a business trip.

Hinckley Named to Commerce

On June 21 the President sent to the Senate for confirmation the name of Robert H. Hinckley for the post of Assistant Secretary of Commerce, thus quieting rumors that Mr. Hinckley might not go into that office. Quick confirmation is expected. Mr. Hinckley was one of the original members of the Civil Aeronautics Authority. He became chairman following the resignation of Edward J. Noble who is now Under-Secretary of Commerce. A strong advocate of civilian pilot training, Mr. Hinckley originated this program and has actively fostered it in CAA. In Commerce he is expected to specialize in aeronautics, with the administrator reporting through him to Secretary of Commerce Harry Hopkins.

Scadta and Saco Airlines Merged in Colombia; All Germans Replaced

Important South American Systems Now Operated 100% by North Americans and Colombian Nationals; Schedules Being Improved

Merger of the Scadta and Saco air transport companies in Colombia, South America, on June 8 and the replacement of German technical and administrative personnel with North American personnel, is considered to be significant in view of the present war situation and hemispheric defense.

A new company known as Avianca—National Airlines of Colombia—was formed at a meeting of stockholders at Barranquilla, Colombia. Several Douglas DC-3 21-passenger transports will supplement the fleet of Boeing 247 10-passenger transports already in service.

Juan T. Trippie, president of Pan American Airways, made the following statement on the reorganization of the services, his company having owned for a number of years a substantial interest in Scadta whose lines connect with the Pan American system at Barranquilla and Cali:

"The Scadta System and the Saco Airline of Colombia were consolidated by stockholders' action on June 8. The new company, National Airlines of Colombia, known as Avianca, has arranged to avail itself of the technical and administrative experience of Pan American Airways, in which connection trained American personnel has already been sent to Colombia to cooperate with native Colombian personnel in the administration of the company.

New Equipment

"Avianca is acquiring several modern 21-passenger Douglas transports which will supplement the fleet of 10-passenger Boeing transports already in service in Colombia. The plan contemplates the general improvement of all services now operating in Colombia and the systematic training of Colombian nationals to assume the technical and administrative operation of the services. Avianca has been appointed as general agent for Pan American Airways System in Colombia and will provide technical and ground services at Colombian airports served by the international lines."

From Barranquilla came the following additional information: All German personnel of the old Scadta organization have been retired. In their place have been installed North American personnel made available by the cooperation of Pan American Airways, these including pilots, radio operators, mechanics, airport chiefs and certain of the more important administrative positions. A training program is being instituted for Colombian nationals looking forward to their eventually taking over the complete operation of the domestic airlines.

Some 80 working contracts of the old Scadta organization were involved and payments of severance indemnities and contract salaries as required by Colombian law were made by the new company to the retiring personnel. The amount of severance pay is estimated to be approximately 500,000 pesos.

Replacement of German personnel

has been going on for about three months, beginning first with radio communication men. On June 8 the last representation on the officer's list and on the directorate disappeared.

A general improvement of services is being instituted. The first express schedules are being instituted with North American first pilots and Colombian co-pilots, using Douglas equipment over the important Magdalena River route linking the country's principal seaport on the Caribbean and Bogota, the capital. Plans are under way for broad improvement in schedules and frequencies over all main operating routes.

German Co. Displaced

Aero Exploration Co., Tulsa, Okla., has organized a subsidiary, Aero Fotografica, S. A., in Bogota, Colombia, for a mapping contract with the Colombian government and oil companies, displacing a German aerial photography company.

Graves Recovering

John C. Graves, director of the foreign and agency department of Transcontinental & Western Air, Inc., is recovering from a serious operation in Presbyterian Hospital, Newark. He left the hospital June 22 and was expected back at work by July 1.

Clarke from CAA to PCA

W. H. Clarke, a former CAA inspector, has been appointed assistant superintendent of maintenance for Pennsylvania-Central Airlines. It has been announced by Luther Harris, vice-president—engineering & maintenance.

Private Ownership Urged

H. J. Rand, New York City, former secretary of the NAA, in a statement to the press has advocated government assistance to promote private ownership of low priced planes as a means of pilot training at less cost than government training in government-owned craft. "If the government would subsidize the pilot owner to the extent of one-half of the down payment (on a \$1,000 plane), or \$125, and one-half of the monthly installments, \$20, its investment would amount to a little over \$600."

Work on WPA Projects to Be Expedited

Col. F. C. Harrington, commissioner of Work Projects, has issued a list of 73 projects which the War and Navy Depts. consider of first importance and upon which WPA work is to be expedited in every possible way. The projects connected with aeronautics follow:

ALABAMA—Southeast Air Depot, Mo-MASSACHUSETTS—Westfield Municipal Airport; Maxwell Field.
ARIZONA—Tucson Municipal Airport.
CALIFORNIA—Sacramento Air Depot; March Field.
COLORADO—Lowry Field.
CONNECTICUT—Hartford Municipal Airport; New Haven Municipal Airport; Bridgeport Municipal Airport.
DISTRICT OF COLUMBIA—Bolling Field; Navy projects in Anacostia.
FLORIDA—Gainesville Municipal Airport; Miami Municipal Airport; St. Petersburg Municipal Airport; Tampa Air Base; Navy airfields at Key West and Jacksonville.
ILLINOIS—Scott Field; Great Lakes Naval Air Station.
LOUISIANA—Barksdale Field.
MAINE—Portland Municipal Airport; Waterville Municipal Airport.

MISSOURI—St. Louis Municipal Airport.
NEVADA—Tonopah Municipal Airport.
NEW HAMPSHIRE—Manchester Municipal Airport.
NEW MEXICO—Albuquerque Municipal Airport.
NEW YORK—Mitchel Field.
PENNSYLVANIA—Middletown Air Depot.
TEXAS—Midland Municipal Airport; San Antonio area.
UTAH—Ogden Air Depot.
VIRGINIA—Langley Field.
WASHINGTON—Bellingham Municipal Airport; Everett Municipal Airport.
TERRITORY OF HAWAII—Whale Field; Hickam Field.

EAL Placing Own Name On 16-Story N. Y. Bldg.

Capt. Eddie Rickenbacker, president and general manager of Eastern Air Lines, has signed a lease that will give the name of Eastern to the 16-story building at 10 Rockefeller Plaza, New York, and establish there the company's headquarters.

According to terms of the lease, EAL will take all the office space remaining in the building (nearly 25,000 sq. ft.) for its executive headquarters, as well as extensive space on the main floor for a ticket office and large passenger terminal. The company will move to the new location from 1775 Broadway within six weeks.

The ticket office and terminal will augment ticket and passenger offices now in operation at 51 Vanderbilt Ave. and at the Pennsylvania Hotel.

United's 'Local' Run Cracks New Market

United Air Lines' 25% fare cut on its Los Angeles-San Francisco "local" (two-stop) run has boosted traffic over that route from a former 30% load factor to 80%, according to Homer Merchant, regional traffic manager at Los Angeles.

Heralded as experimental and revolutionary—although following the lead of railroads in establishing lower rates for local service, higher rates for "luxury" through service—United sets a round trip price of \$25 for the 350-mi. flight in Boeing 247-D's. Regular Douglas DC-3 non-stop cost for the round trip is \$34.10.

Merchant said: "Since we began the plan Apr. 10 we have added an extra schedule, making three in operation on this 'local' run. We know that most of the traffic represents new customers, because more than 80% pay cash, whereas 50% of the regular coast traffic uses scrip."

Flying the distance in three hours, compared to two hours for the Douglasses, the Boeings go via Santa Barbara-Del Monte on two schedules daily, via Bakersfield-Fresno on the other.

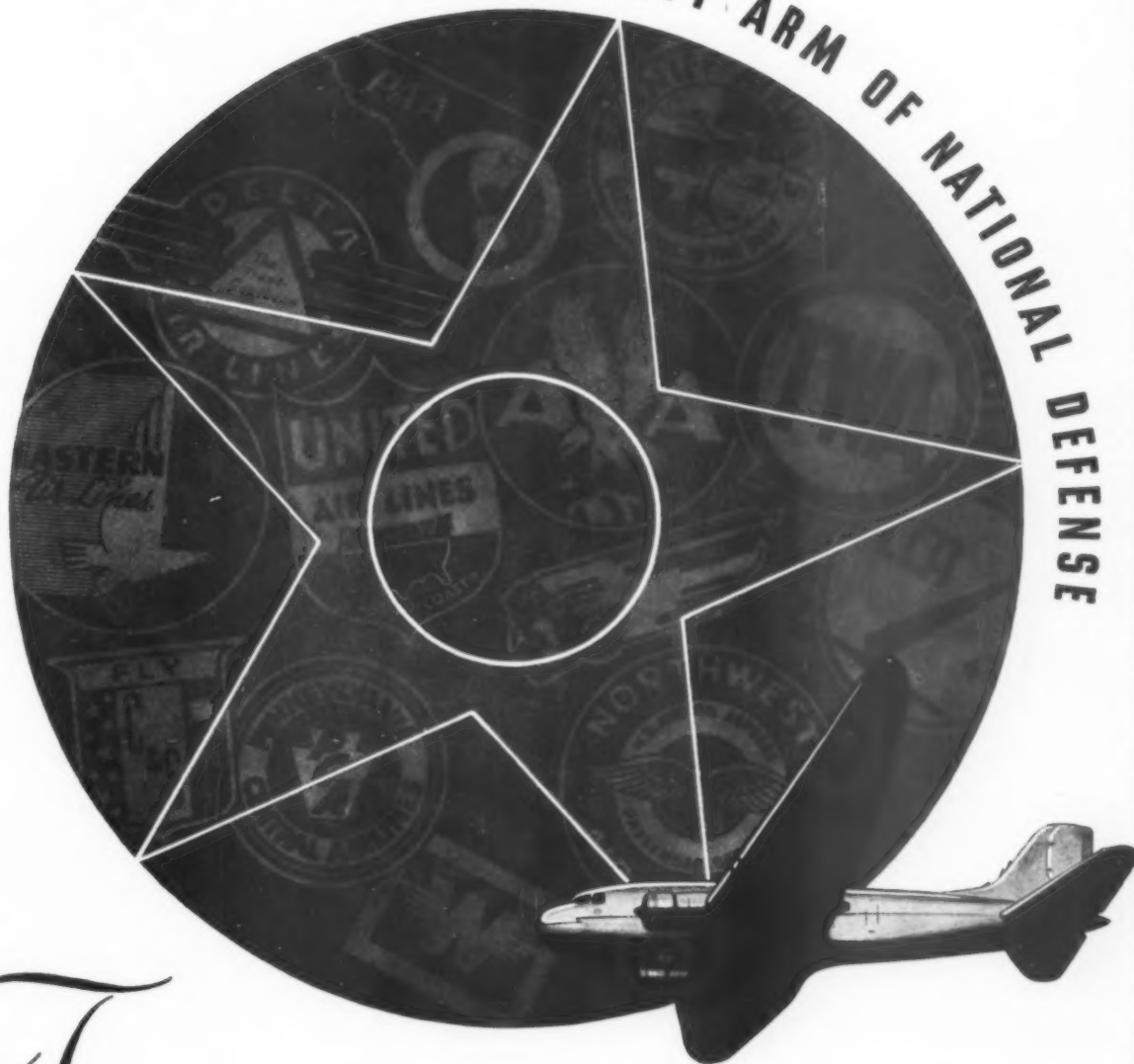
Merchant added that "intermediate business is up 100%." Although he would say only that "we may expand this service," it was learned that United undoubtedly would try the system for 60-90 days, then add several more schedules.

TCA Expects Profit

Unless war interferes with Trans-Canada Air Lines' operations, the company will show a substantial profit this year compared with last year's \$400,000 deficit, Minister of Transport C. D. Howe said. He also announced that the line's Toronto-London-Windsor service will be inaugurated about July 1, permitting connections with U. S. lines at Detroit.

THE WORLD'S FINEST AIRLINES

*** CONSTITUTE A MIGHTY ARM OF NATIONAL DEFENSE



Today when a Douglas DC-3 drones overhead be thankful its mission is peaceful. But think further and realize that it and a vast fleet of sister ships in U.S. airline service constitute an efficient second line of national defense.

The tragedy of Europe has taught many military lessons including the importance of air transports for troop and supply movements. While

Douglas contributes in unstinting measure to U.S. military aircraft needs, DC-3 airline deliveries continue apace. Thus in peaceful pursuits have the above major airlines of America built up the world's finest air transport system and a mighty arm of defense. It pays to fly for business and pleasure—also for national security. Douglas Aircraft Co., Inc., Santa Monica, California.

DOUGLAS



First Around the World
... Now the World Over

American Airlines, Inc. ... Braniff Airways ... Canadian Colonial Airways, Inc. ... Chicago & Southern Air Lines, Inc. ... Delta Air Lines ... Eastern Air Lines, Inc. ... Northwest Airlines, Inc. ... Pan American Airways System ... Pennsylvania Central Airlines ... T.W.A. ... United Air Lines ... Western Air Express ... Wilmington-Catalina Airline

Denver Gets Set to Entertain 800 Visitors During Air Congress

A gathering of some 800 delegates who will enter into discussions on problems the U. S. faces in building up its air strength is expected to be on hand for the National Aeronautic Association's first Air Congress to be held in Denver, Colo., from July 7 to 10. Policies for airport development, planned and developed airways systems, standards of training and a variety of other subjects will be discussed.

Presiding over the three business sessions will be Senators D. Worth Clark (D., Ida.) and Edwin C. Johnson (D., Colo.) and Congressman Lawrence Lewis (D., Colo.).

Among key speakers will be Comdr. Francis W. Reichelderfer, chief of the U. S. Weather Bureau; Robert H. Hinckley; Thomas A. Morgan, chairman of the board of Sperry Gyroscope Co. and chairman of the executive committee of Pan American Airways; Gen. W. G. Kilner, NAA vice-president and a director of Pan American; Col. Gerald C. Brant, commanding officer of the Army Air Corps Technical Schools; Col. Jacob H. Rudolph, commandant of Lowry Field, Denver; Harry Coffee, vice-president, Northwest Aviation Council; C. R. Mooney, secretary, Southwest Aviation Council, and many others.

Discussion panels will be directed by W. A. Patterson, president, United Air Lines; Jack Frye, president of TWA; C. R. Smith, president, American Airlines; Robert Six, president,

Continental Air Lines; Col. Edgar S. Gorrell, president, Air Transport Association; Col. Jack Jouett, president, Aeronautical Chamber of Commerce; Carl Squier, vice-president & sales manager, Lockheed Aircraft Corp.; Bernarr MacFadden, editor of *Liberty*; Devon Francis, aviation editor of the AP; Glenn L. Martin, Richard du Pont and others.

During the congress ground will be broken for a new \$300,000 hangar at Denver Municipal Airport to house offices and shops of Continental Air Lines and United Air Lines.

Leading various delegations to the congress will be Capt. Gill Robb Wilson, NAA president; William Redding, NAA treasurer and Denver Chamber of Commerce representative in Washington, and more than a dozen NAA chapters from the mid-west, northwest and California which have indicated they will fly to the mile-high city.

Charles O. Woodworth, manager of Denver Municipal Airport, has made plans to accommodate more than 300 planes expected for the meeting.

Preceding the congress Denver will stage a free air show, July 4-6, under the direction of Steadham Acker, director of the annual National Air Carnival at Birmingham, Ala.

The Ninety Nines, international organization of women pilots, will hold its annual convention in Denver during the congress on the dates July 6-7.

CPTP ACCIDENT REPORT

Excess Wing Stresses Caused Only Death in Program, ASB Finds

"Failure of the right wing structure due to the imposition of stresses in excess of those for which it was designed," has been given by the Air Safety Board as the probable cause of the crash and death of Sam Kay Von Schritts on Feb. 14, near Pittsburg, Kan.

Von Schritts was the only student killed during the past year in the CAA's civilian pilot training program. He failed to bring the plane, a Piper J3P-40, out of a dive following a spin.

Following the crash, the ASB recommended that (1) present stall and spin instruction requirements be revised to effect a wider distribution of such instruction over the entire training period rather than concentrating it in a relatively small number of flights; (2) more dual instruction be required in 1, 2 and 3-turn spins, but that solo practice in this maneuver be limited to one-turn spins until the student has logged at least 15 hrs. solo flying time; (3) student pilots are prohibited from entering intentional solo spins at less than 3,000 ft., and (4) fire extinguishers in planes be located and secured so they will not interfere with normal operation nor be inadvertently dislodged.

Spartan Employs 2

L. J. Lipney, a graduate of the Air Corps Technical School at Rantoul, Ill., and William M. Gray, formerly assistant crew chief and flight mechanic at Middletown Air Depot, Pennsylvania, have been employed as instructors at the Spartan School of Aeronautics, Tulsa, Okla.

New WNAA Members at KC

New members of the Kansas City, Mo., unit of WNAA are Mrs. Lois Walker, Mrs. C. R. Mooney, Mrs. Ethel Bartholomew, Mrs. Ena Pugh and Mrs. Cordelia A. Swearengin.

Civil Training Program Under Way; Non-College Group Starts July 1

First phase of the expanded CAA program to train 45,000 pilots by July 1, 1941, was getting under way as this issue went to press, with the first 15,000 college and non-college students, who are expected to complete their primary instruction by Sept. 1 of this year, beginning their training.

It is learned that during the summer college phase, training will be free, and students will not be required to pay the \$40 fee similar to that under the past program. The \$40, which covers insurance and other items, will be paid by the ground instruction contractor out of his fee from the CAA. Even the \$6 medical exam charge will be refunded to students passing the test.

The college phase began in some schools on June 15, and non-college was to start July 1, which also was the date for secondary instruction to get under way. This latter instruction is to be extended to 1,000 students who have completed elementary training. About 100 schools will participate.

Operators are to be paid \$325 for each primary student and \$750 for each secondary. Colleges are to get \$50 for each ground school student.

New Link for Students

Spartan School of Aeronautics, Tulsa, Okla., has provided its advanced flight students with the latest type series E Link trainer which is used with a 28 class Spartan biplane in training pilots for instrument rating examinations.

Mile-High City Prepares for Air Congress



Some of the sights to be seen in Denver by delegates who will attend the 1st National Air Congress and NAA Convention are depicted in this layout. No 1 is a view of Lowry Field at Denver, home of the Army Air Corps Technical School, which will be visited by Congress delegates. 2. Planes of Denver NAA members ready for a mass flight to Cheyenne, Wyo., to boost the Congress and the air show which will be presented at Denver's municipal airport, July 4-6. 3. Air view of downtown Denver taken by the Army Air Corps. 4. Morgan R. Nickell, general chairman of arrangements for the Congress. 5. Denver's million dollar municipal airport.



70 CONTESTANTS AT NIFC TOURNEY

Unfavorable Weather Does Not Deter Collegians in Their 6th Annual Meet

Although the weather was cold with high winds and intermittent rain, 70 contestants representing 24 colleges and universities participated in the 6th Annual National Intercollegiate Air Tournament at Lock Haven, Pa., on June 20-22. Only one minor ground accident was recorded during the meet which established a record of 280 landings and takeoffs, amounting to 24 per hour, from the small field.

Winner of the 360° spot landing contest, from 1,000 ft., was William Watson of Williams College, Williamstown, Mass. Second and third winners were Robert J. Neal, Kent State University, Kent, O., and Dean Triplett, Akron (O.) University.

Erwin Huber, representing Loyola College, Baltimore, Md., won the free approach spot landing from 500 feet.

In the bomb dropping event, staged from 500 ft., Earl Rottmayer, University of Michigan at Ann Arbor, nosed out in first place. William Watson was second, and Dean Triplett was third.

The University of Michigan's team scored the most points in the meet, 26, and thereby won the Aviation Editor's Trophy. Scoring second and third were Williams College with 25 and the University of Detroit with 24.

Gold, silver and bronze replicas of the United Air Lines' Safety Trophy were given first, second and third place teams in safety competition. They were: First, Williams College; second, Ohio State University, Columbus; third, Stanford University, Palo Alto, Cal. The large United trophy will become the permanent possession of any team winning the safety competition three times.

The Piper Trophy and the Taylorcraft Trophy, each awarded to the high-point scorer of the meet, went to William Watson who totaled 25 points. In addition, Taylorcraft Aviation Corp. agreed to employ the high-point scorer during summer months.

The Midwest Trophy, donated by the Akron University Flying Club and awarded to the high-point scorer from midwestern colleges and universities, was won by Dean Triplett.

Murray Shubin won the Kenyon College Trophy, awarded to the high-point man of the Kenyon team, and the Warner Trophy, awarded to the high-point scorer of any Michigan college, was earned by Carl Rottmayer. William Watson was winner of the O'Neil Trophy.

Judges for the meet were C. S. Logsdon, assistant to the secretary of NAA, Washington, D. C.; Grover Loening, aviation consultant and honorary president of the NIFC, and Donald Gretzer of Gambier, O.

Speakers at the banquet which marked the close of the meet were Maj. Samuel C. Eaton, Jr., Army Air Corps, from Middletown (Pa.) Air Depot; Lt. Comdr. Alvin Price of the Navy; W. T. Piper, president of Piper Aircraft Corp., Lock Haven; Lucien Zacharoff, and C. C. Thompson, vice-president of United Air Lines, who presented the United Air Lines' Safety Trophy replicas.

Casey Jones Seeks Space

Casey Jones School of Aeronautics Inc., Newark, N. J., has applied for lease of an additional 50,000 sq. ft. of space in Center Market, a city-owned building at 1100 Raymond Blvd. School now operates 70,000 sq. ft.

Off For Tournament



Edgar Bergen wishes the University of Southern California's flying club "happy landings" prior to departure of members for the National Intercollegiate Air Tournament at Lock Haven, Pa. Left to right are Joseph L. McClelland, Jr., J. Stanley Smith, Arch McGregor and Bergen. Bergen planned to take delivery on a Stinson 105 early in July.

Texas Private Fliers Assn.

Formed as PFA Affiliate

Organization of the Texas Private Fliers Association was perfected recently as a state body affiliated with the Private Fliers Association Inc. The following officers and board members were elected:

President, C. A. "Abe" Miles, Jr., Liberty; vice-presidents, Phene Williams and Bill Campbell, Dallas; secretary-treasurer, George Haddaway, editor of "Southern Flight," Dallas. Two-year members of the board of governors—Dick Martin, Amarillo; George Vordenbaum, San Antonio; Bert Williams, Anahuac; Les Bowman, Ft. Worth; Clint Breedlove, Lubbock. One-year members—Dr. W. P. Malone, Big Spring; Mrs. Barney Moore, Corpus Christi; C. C. Howard, Waco; Roland Roberts, Gladewater; Mrs. C. F. Kolp, Electra.



Miles

Franklin 50 Improved

The improved Franklin 60-hp. engine, known as model 4AC-150A, recently announced by Aircooled Motors Corp., Syracuse, N. Y., is the Franklin 50, rerated and improved. The company indicated that there will be no increase in price of the improved 60 over that of the 50. Size and weight likewise remain the same.

C. A. A. ACTIONS

(Pilot Certificates, Letters of Authority, Publications, Miscellaneous. For Airline Regulation, See Air Carrier Record. Serial Numbers of Orders and Dates in Parentheses.)

Pilots

Revocations

Noel C. Benner, Forest Grove, Ore., student pilot certificate 78324 revoked for piloting an aircraft carrying a person other than a certificated instructor actually giving instruction, in violation of the Civil Air Regulations. (June 7, 541).

Conrad Hatland, Turner, Mont., student pilot certificate 75744 revoked for piloting an aircraft although his competence to make a solo flight had not been certified to by his instructor on his student pilot certificate, and other violations of the CAR. (June 7, 542).

William F. Krenwinkel, Los Angeles, Cal., private pilot certificate 48340 revoked for piloting an aircraft acrobatically over a congested area without being equipped with a parachute, and other violations of the CAR. (June 7, 543).

Civil Penalties

The following orders in compromise of civil penalties for certain violations of the Civil Aeronautics Act and the CAR have been accepted by the CAA: (June 5, 535), Paul J. McKusick, Sacramento, Cal., for piloting an aircraft on a civil airway before sunrise although the aircraft was not equipped with proper navigation lights, \$25.00; Jack Denison, Stephenson, Ala., for piloting an aircraft on a civil airway although he was not possessed of a valid pilot certificate, and other violations, \$50.00; (June 4, 536), Gene C. Garrett, Mexico, Mo., for authorizing the flight of an aircraft not possessed of a valid registration certificate, \$25.00.

Herbert G. Hager, Tacoma, Wash., for piloting an aircraft on a civil airway carrying a person other than a certificated instructor actually giving instruction, in violation of the terms of his solo pilot certificate, \$50.00; Robert Jeff Thomas, Payallup, Wash., for piloting an aircraft on a civil airway carrying a person who occupied a control seat of said aircraft when the dual controls thereof had not been made inoperative and when neither he nor the passenger carried held a pilot certificate valid for the operation involved, \$75.00; (June 7, 544), Cornelius J. J. Horgan, Hills Grove, R. I., for piloting an aircraft on a civil airway carrying a passenger who occupied a control seat of said aircraft when the dual controls had not been made inoperative and when neither he nor the passenger carried held a pilot certificate valid for the operation involved, \$25.00.

(June 7, 546), S. Edward Thomas, Phoenix, Ariz., for piloting an aircraft on and across various civil airways when said aircraft was not possessed of a valid airworthiness certificate, \$50.00; (June 11, 549), Robert G. Love, New Castle, Pa., for piloting an aircraft on a civil airway carrying a person other than a certificated instructor actually giving instruction in violation of the terms of his solo pilot certificate, \$50.00; Eugene Stevens, Jackson, Miss., for piloting an aircraft on a civil airway outside an area within a 25-mile radius of his point of take-off in violation of the terms of his student pilot certificate, and other violations, \$50.00.

Referred to Dept. of Justice

The CAA has referred the following cases to the Attorney General for judicial action on violations of the Civil Aeronautics Act and the CAR: (June 11, 550), Cornell Taylor, Canoga Park, Cal., for piloting an aircraft on a civil airway without being possessed of a valid pilot certificate, and other violations; (June 14, 554), Jack R. Thornton, Glendale, Cal., for piloting an aircraft on a civil airway carrying a person other than a certificated instructor actually giving instruction.

Civil Air Regulations

Adopted amendment 57 of the CAR redesignating radio fixes, control zones of intersection, and airway traffic control areas.

Adopted amendment 58 of the CAR providing for a new method of certification and rating of air traffic control tower operators (Part 26), effective Aug. 15, 1940.

Luscombe Approval

Approval of Luscombe airplanes with Lycoming 65 hp. engines has been announced. Same performance is delivered as with the Continental 65-115 top speed, 104 cruising and 37 landing.

Omaha School Opened

Aviation Industries Inc., Wichita, Kan., with G. R. Morton as president, has opened a school at Omaha, Neb., to instruct students in sheet metal work for aircraft construction.

TWO CAN BE COMPANY...BUT Even five is no crowd



New Waco Model "E" Airstocrat Is Finest Most Comfortable Plane of Its Power Class

● Licensed to carry five in greater comfort without crowding is the new Waco Airstocrat. It's faster per passenger horsepower than all others.

Interior finish like a fine automobile. Pilot does not broil in the sun. "Cushioned Power" engine mounting, completely enclosed cowl and a multitude of other refinements. You get all this at the lowest operating cost per horsepower mile. So see the Waco "E."

WACO AIRISTOCRAT

WACO AIRCRAFT CO.



TROY, OHIO, U.S.A.

AVAILABLE WITH JACOBS, LYCOMING, PRATT & WHITNEY ENGINES

Thanks, Capt. Findley!

The following appeared in the May issue of *U. S. Air Services*, edited and published by Capt. Earl Findley:

"We are indebted daily, except Sunday, to AMERICAN AVIATION DAILY, Earle Building, Washington, D. C., for news of what is happening in aviation circles in the Capital and elsewhere. We used to get along without this service, but having enjoyed its benefits now for the last four months, we depend upon it, look forward to the pleasure of reading the items with the breakfast coffee, and then start the day feeling able to cope with anyone who thinks he has all the lowdown. Wayne Parrish and his crew are doing an important job and doing it so well that it is not only a pleasure but a duty to insert this notice."

Such unsolicited compliments are nice to receive. The publishers of AMERICAN AVIATION DAILY have received many such comments from the host of subscribers who either read the DAILY with their breakfast coffee, like Capt. Findley, or the first thing on arrival at their offices. If you are an executive in aviation today, you, too, should acquire the AMERICAN AVIATION DAILY habit.

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**American Aviation
Daily**

**Earle Building
Washington, D. C.**

Seaboard Railway Seeks Airline From Boston to Miami, New Orleans

New Company, Headed by Alvin P. Adams, Would Operate DC-3's and DC-4's; Eastern, American Now Have Monopoly, Application Says, Claiming Competition is Desirable

First step toward the entrance of another railroad into the aviation field was taken June 21 with the filing by Seaboard Airways, Inc., subsidiary of Seaboard Air Line Railway, of an application for mail-passenger-express-freight routes from Boston to Miami and New Orleans.

Only other railroad attempting to operate an airline is Kansas City Southern, through its subsidiary Kansas City Southern Airlines, which has filed an application for Kansas City-New Orleans. An examiner's report has not yet been issued in the case.

Between Boston and Miami, Seaboard proposes stops at New York, Philadelphia, Washington, Richmond, Raleigh, Charleston, Savannah, Jacksonville and West Palm Beach, with an alternate from Raleigh to Savannah via Charlotte and Columbia and from Jacksonville to Miami via Tampa and West Palm Beach. On the Boston-New Orleans operation, stops are asked at New York, Philadelphia, Washington, Richmond, Raleigh, Charlotte, Atlanta and Birmingham, with an alternate between Richmond and Atlanta.

The company, which was incorporated on June 18 and which estimates that it will need \$4,600,000 for equipment and working capital, is headed by Alvin P. Adams, former president of Western Air Express. W. V. Lawrence, assistant to the chief accounting officer of Seaboard Air Line Railway, is vice-president, and W. B. Pope, special assistant to the treasurer and secretary of the railroad, is secretary and treasurer. Directors include Legh R. Powell, Jr., Norfolk, Va.; C. E. Bell, Norfolk; Henry W. Anderson, Richmond, and Adams.

Will Buy Douglas

Five Douglas DC-4 40-passenger airplanes, each equipped with four 1,250-hp. Pratt & Whitney 1830-D engines, and nine DC-3 21-passenger planes powered by 1,050-hp. P&W 1830-C engines, will be purchased, according to the company's application. DC-4's will cost about \$365,000 each complete, and DC-3's \$120,000 each.

The company states that it also is considering the DC-6, which would replace the DC-3. No description of the DC-6 was given. In addition to the above equipment, Seaboard will purchase 17 spare motors and 17 spare propellers.

A total of \$4,600,000 will be needed for equipment and working capital, divided as follows: DC-4's, \$1,825,000; DC-3's, \$1,080,000; working capital,

\$999,000; spare engines, \$170,000; spare propellers, \$59,500; inventory, \$150,000; ground radio, \$66,500; plane radio, \$48,000; field equipment, \$59,500; traffic equipment, \$42,500; executive and contingent, \$25,000; shop equipment, \$25,000; service and maintenance equipment, \$25,000; automotive equipment, \$25,000.

During the first five years, the airline estimates results of operations as follows: first year, \$566,681 loss; second year, \$41,004 loss; third year, \$689,083 profit; fourth year, \$995,808 profit, and fifth year, \$1,270,183 profit. Estimates include mail pay of 31c per mile.

Seaboard states that it will not decrease the business of the present airlines—Eastern from New York to Miami and New Orleans, and American from Boston to New York—but will create new business through entrance into the aviation field.

Claims Monopoly Exists

"On said routes each said company has a complete monopoly of the air traffic," Seaboard's application said. "The service to be rendered by the applicant will be of distinct advantage to the public in that it will afford a service competitive with the service on said routes furnished by Eastern Air Lines and American Airlines, thereby securing and insuring to the public the improvement and stimulation resulting from competitive action."

The company also pointed out that, because of its connection with the railroad, it will be able to offer "co-ordinated air and rail service to all points located in the territory to be served."

Seaboard Airways was incorporated June 18 with authorized capitalization of \$100,000, to be increased to provide for issuance of such securities as may be required to finance the project. "This capital will be subscribed by Legh R. Powell, Jr., and Henry W. Anderson, receivers, Seaboard Air Line Railway Co., in such amounts as may be necessary to finance this applicant prior to the allowance of this application," the company said. When the certificate is granted, capitalization will be increased to provide for common and preferred stock or other securities for financing of the project.

"Such additional financing will be provided through the purchase of part of such stock or securities by the said receivers, subject to the order of the court, and the purchase of part of

Eddie Rickenbacker Says Seaboard R.R. Application is 'Uneconomic Duplication'

Capt. Eddie V. Rickenbacker, president of Eastern Air Lines, strongly protested against the proposed entrance of Seaboard Air Line Railway into airline operations at Tampa, Fla., June 24. When asked by newspapermen for a comment on the railroad's application, he said:

"The attempted contribution of the receivers of the Seaboard Air Line Railway to air transportation is a complete duplication of the service which the Eastern Air Lines system has been operating during the last decade from New York to Atlanta and Florida points, and for the last seven years from New York to New Orleans.

"The application to the Civil Aero-

navics Authority by the railroad indicated that they propose to duplicate, as well, the type of flying equipment that we operate and which we helped to develop along with the other leading airlines of the country.

"I fully believe the public, and the government, will look with disfavor upon such an uneconomic move which, if encouraged, will be the forerunner of chaos in the air transport industry.

"It would be folly to jeopardize the excellent service of Eastern Air Lines by permitting this railroad to extend its operation into an entirely new field, and in territory not even reached by its present service."

Synthetic Rubber



B. F. Goodrich Co. announced at a recent New York preview the manufacture of the nation's first tire made from strictly American material, Ameripol, compounded here by Dr. W. L. Semon (center) for David M. Goodrich, chairman (left), and John L. Collyer, president, of the Akron rubber company, from oil, soap and water.

said stock or securities by other investors," the application said. "Consideration of such financing indicates the practicability of securing the required capital by said means and at a reasonable cost." The railroad is at present "undergoing reorganization in the Federal District Court of the Eastern District of Virginia." Anderson and Powell are described as the owners of the entire outstanding capital stock.

Leslie Craven, who has appeared before the CAA as counsel for Western Air Express, and who represented the WAE minority group in the United-WAE merger case, is attorney for Seaboard.

Delta Employs Graduates

Archer Alston and Charles Downes, graduates of the aeronautical school of Mississippi State College, have joined Delta Air Lines as station agents at Jackson (Miss.) Municipal Airport, according to T. M. Lemly, Jr., central district traffic manager. Jack Bain, June graduate of Millsaps College, has been employed by Delta as reservations clerk in the Atlanta, Ga., office, and Robert Faulk, traffic representative, recently was transferred to the city office at Monroe, La., from the Atlanta city office.

Army Man

(Continued from page 1)

Authority, he will report to the Secretary of Commerce (Harry L. Hopkins) instead of reporting to the five members of the Authority. He will have charge of the civilian pilot training program, certificate and inspection of aircraft, safety regulations and enforcement and the federal airways.

Air Corps

(Continued from page 1)

schools on Aug. 3 will complete its training at the three centers in April 1941, with an estimated 475 to be graduated as military pilots, the War Dept. said. Every five weeks thereafter classes will be graduated, gradually increasing in size until the peak of 685 pilots is reached by Aug. 9, 1941.

Beginning Dec. 1, a school for pursuit instructors will be established at Barksdale Field, and one for navigators and bombardiers will open at the same station on Feb. 15, 1941.

Ground school instructors in primary schools will be increased from a present total of 20 to about 100, it was said. Flying instructors in these schools will be increased from 135 to 430, and from 240 to 1,000 in basic and advanced schools. Employment of about 60 civilian navigation instructors is contemplated.

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EST. 1925

CAA Denies UAL-Western Merger; Approves Sleeper Interchange

Examiner's Report Reversed; Authority Finds Merger Would Give United Predominance on West Coast, Eliminate Only Independent Carrier West of Rockies

Reversing Dean Roscoe Pound's proposed report, the CAA on June 19 announced it had denied the application of United Air Lines for permission to merge with or acquire the assets of Western Air Express, but had approved interchange of sleeper equipment between the companies at Salt Lake City.

The interchange, long sought by UAL and WAE in hearings before the Post Office Dept. and CAA, will permit operation of through sleeper service from Los Angeles to New York and return. UAL crews will operate WAE planes between Salt Lake and New York, while WAE crews will fly UAL equipment from Salt Lake to Los Angeles. TWA has opposed both the merger and the interchange.

"To allow one air carrier to obtain control of air transportation in the west coast area greatly in excess of that possessed by competitors would, in our opinion, seriously endanger the development of a properly balanced air transportation system in this region; and the elimination of the only independent north and south air carrier west of the Rocky Mountains might be expected to retard the promotion of air travel in this direction," the CAA said in denying the merger.

If UAL acquired WAE, it would have 4,147 route miles in the west, compared with American Airlines' 740 miles west of El Paso, TWA's 1,041 west of Albuquerque and Northwest's 994 west of Billings, the CAA explained. Total population of cities served by UAL would almost equal the other three airlines combined, it said, adding that similar advantages also would be apparent in passenger and mail traffic.

Balanced System Necessary

"In reaching a judgment on the soundness of the present proposal of the applicant, we recognize the fact that air transportation in the U. S. . . is still in a stage of rapid development and expansion, and that neither the limits of that expansion nor the ultimate design of the national air map can at this time be safely predicted," the opinion said. "The regulatory policy set forth in the Act indicates that Congress was fully aware of this fact. Past experience in the

air transport industry . . . presented abundant evidence of the harmful effects of uneconomic duplication of services, unsound combinations and undue concentration of economic power.

"Reference to both the legislative history and to the text of the Act demonstrates the Congressional intent to safeguard an industry of vital importance to the commercial and defense interest of the nation against the evils of unrestrained competition on the one hand, and the consequences of monopolistic control on the other. In attaining this objective, the Act seeks a state of competition among air carriers to the extent required by the sound development of the industry. The maintenance of such a constructive competition, we believe, will be best served at the present state of the industry's development by a reasonably balanced system of air transportation in every section of the country.

"Size alone cannot be said to be the determining factor in judging a carrier's conformity to such a balanced system . . . It is the concentration of ownership and control which is fatal to the operation of a competitive economy."

WAE is in a favorable position to develop local traffic and to furnish competition to UAL, the CAA said. "The record not only indicates that Western is financially self-sufficient at the present time, but also that the organization is, from an operating standpoint, active and aggressive in the promotion of new business in the west . . . The evidence fails to convince us that United could be expected to furnish a more effective or economical local service than that now provided by Western," it added.

Removes Inconveniences

In answer to UAL's contention that passenger inconvenience at Salt Lake would be removed, the CAA said that the interchange would accomplish the same purpose. It denied (1) that WAE has an equipment shortage, (2) that WAE has been slow to adopt new ideas or improved equipment, (3) that service would be materially improved by United being able to skip Salt Lake on Los Angeles trips in bad weather, pointing out that only 15 San Francisco trips failed to make the stop last winter, (4) that economies of the merger were substantial, and (5) that the merger would aid the national defense.

TWA's V. P.—Engineering



D. W. "Tommy" Tomlinson, Chief engineer and "overweather" research flyer for TWA, has been elected vice-president in charge of engineering for the line, a newly created position. Jack Frye, president, said Tomlinson's election was made in recognition of the increasing value of engineering and research.

In approving the interchange, the CAA found that elimination of changes of planes at Salt Lake in early morning hours "will improve the service offered to passengers flying to and from Los Angeles over the routes of Western and United. The coordination of transportation by air carriers is expressly mentioned in section 2 (b) of the Act as one of the factors to be considered by the Authority as being in the public interest."

The opinion said, however, that "in order to avoid the possibility of any control of Western by United . . . the Authority will condition its approval of the agreement upon the adoption of a rental charge covering the depreciation on sleeper planes during the time they are leased under the agreement." United and WAE had contended that such a charge was unnecessary.

TWA had advanced three major objections to the interchange: (1) it will result in curtailed sleeper service to other west coast points on UAL's system, (2) TWA will lose a substantial amount of its transcontinental business and its continued existence as a transcontinental operator will be endangered, and (3) United will have a virtual monopoly of all west coast business.

Answers TWA Objections

In answer to TWA's first objection, the CAA said: "We find that the evidence in the record fails to establish that United's sleeper service to San Francisco and the northwest will be materially curtailed under the proposed schedules adopted by the applicants pursuant to the agreement, and that there is nothing inherent in the agreement which will adversely affect the present service rendered by United."

On TWA's second objection, the opinion said: "The fact that the inauguration of improved service will have incidental effects which will adversely affect competing air carriers is not in itself sufficient to render the improvement inconsistent with, or adverse to, the public interest. Western and United already are jointly competing with the intervenor for Los Angeles traffic, and they should be permitted to attempt to increase their transcontinental traffic by improving their service, at least in the absence of more important fac-

PFA Crystal Gazings

Predicted in the Private Fliers Association June bulletin are: Equivalent of present 50-hp. planes at under \$990 apiece within a year and 75-hp. ships of 130-140 mph. at \$1,200-\$1,400.

Production of units under 100 hp. at rate of more than 20,000 per annum within a year.

Number of civil airplanes and pilots in the U. S., within three years, exceeding those of all types whatsoever in the whole of Europe, U. S. S. R., and their colonial possessions.

tors weighing against the public interest . . .

"If, in the ordinary case, competitors are to be prevented from inaugurating improvements in service solely as a protection to a particular air carrier, the development of an adequate air transportation system in this country will be retarded rather than assured.

"We find that the facts appearing in the record fail to establish that the agreement . . . will endanger the intervenor's continued existence as a transcontinental operator, or that unsound economic conditions in air transportation will result from the operation thereof; and whatever loss of business the intervenor will suffer will be offset by the advantages of the interchange to the public."

The CAA stated that the interchange differs from the merger in that the latter "involves the elimination of one of the connecting air carriers as such rather than a mere improvement in the joint service rendered by the two independent connecting air carriers."

On TWA's third objection, the opinion found that the agreement "will not operate to give United control over Western, and, since, no additional control over air transportation is involved, that it will not result in creating a monopoly."

Coulter Hails CAA Decision Approving Plane Interchange

Approval by the Civil Aeronautics Authority for the interchange of equipment by United Air Lines and Western Air Express "establishes a new foundation of sleeper service in air transportation which will benefit the entire transportation industry of the U. S. as well as service to the public," William A. Coulter, president of Western Air Express, wired AMERICAN AVIATION following the decision.

He stated that the company will proceed immediately with its long range program calling for extension of its route from Great Falls, Mont., to Lethbridge, Canada, on the north and from San Diego to Phoenix and Palm Springs on the south.

"Western Air Express and United Air Lines for years have carried on a close working arrangement to provide the maximum of good service to the public and we naturally will continue this policy, as the two companies have always maintained their friendship throughout the merger negotiations."

Coulter said he planned to remain in Los Angeles and devote his full time to the management of the company which he now heads.

WAE Opens Scenic Route

Western Air Express on June 11 inaugurated a new route from Salt Lake City to Yellowstone National Park by way of the Grand Tetons and Jackson Hole country, opening this scenic territory for the first time to all travelers. Throughout the east, WAE and United Air Lines, jointly, are conducting an advertising campaign to attract tourists to the West, and WAE is reported to be spending \$24,000 in Los Angeles alone to promote travel into Utah, Montana and Idaho this summer.

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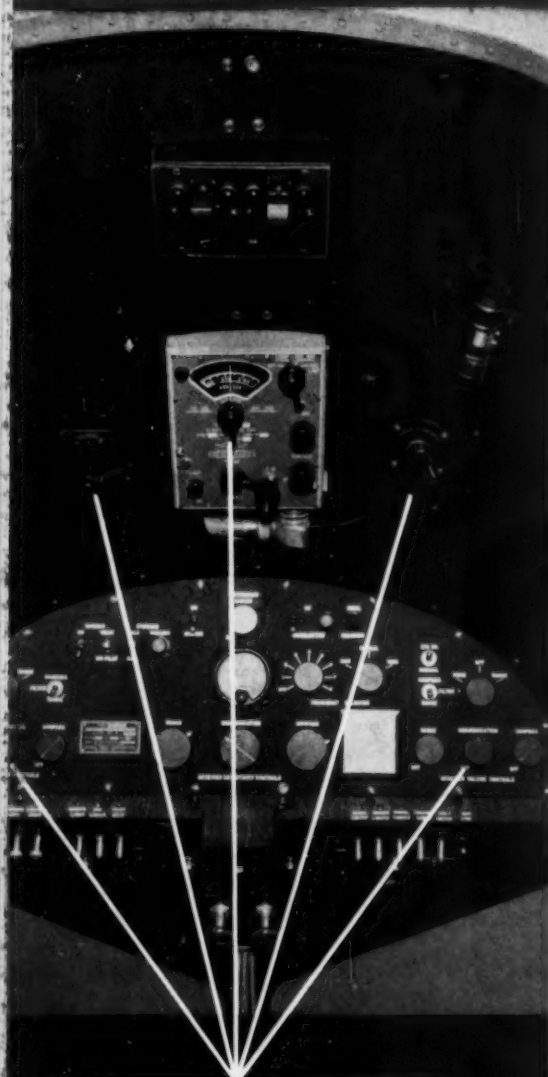
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On these pages are a few of the results of this survey...and how the Lodestar reflects them. These are the *extra* reasons why Lockheed now can say—"the Lodestar is a *three-way favorite!*" With *passengers*, because of its luxury! With *operators*, because of its profit-producing performance! And with *pilots*, because of its all-around wealth of "Pilot Appeal."

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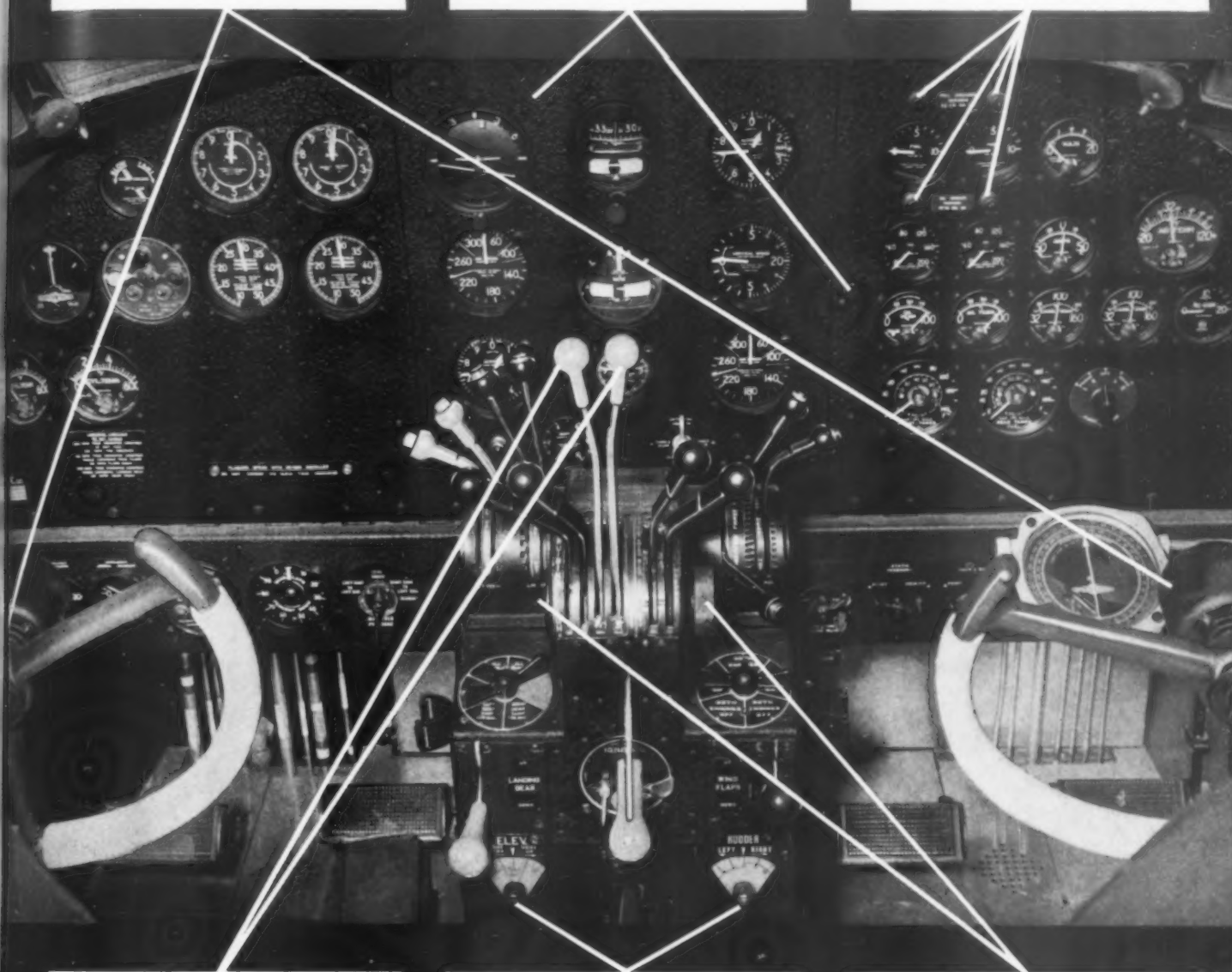
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65% of pilots who answered the questionnaire said that they preferred entire flight instrument panel to be shock mounted.....

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77% of pilots answering said they preferred all warning lights near their respective instruments or control lever rather than in a separate row.....

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84% of pilots answering said primary engine controls were preferred at approximately the same location, fore and aft, as the center of the wheel...

THIS IS A LODESTAR FEATURE

88% of the pilots who answered the questionnaire said they preferred elevator and rudder tab controls to be mechanically operated.....

THIS IS A LODESTAR FEATURE

70% of pilots answering said they preferred all major engine controls on one shaft, rather than in stair step or other formation.....

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Results shown on these pages are merely parts of a Lockheed survey, which covered other airplane types. The results show conclusively what the men who know airplanes best really want the airplanes of tomorrow to be. For a copy of a handbook of the complete findings, fill in this coupon and send to the Market Research Division, Lockheed Aircraft Corporation, Burbank, California.

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Airline Traffic Survey

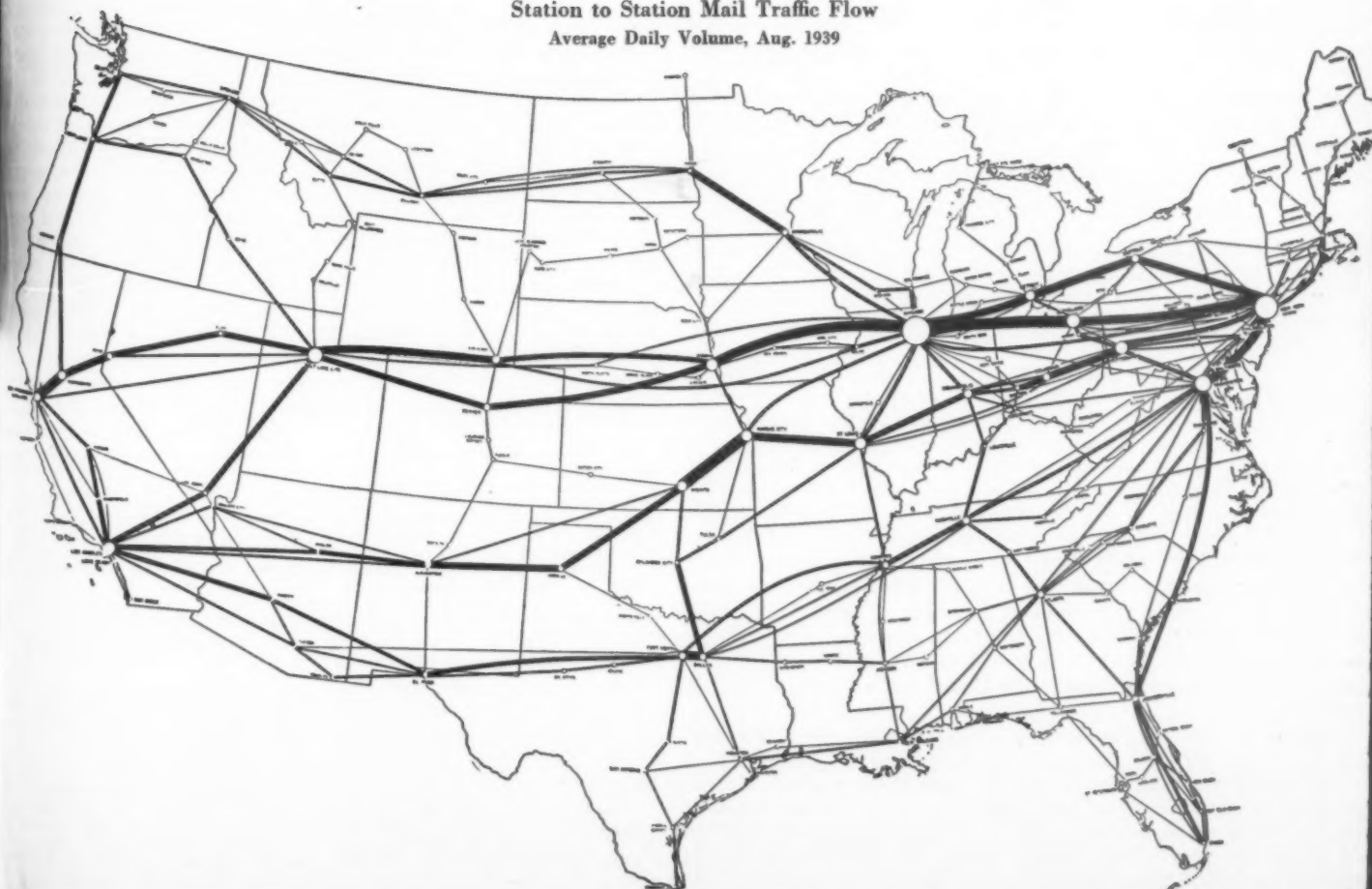
Station to Station Passenger Traffic Flow

Average Daily Volume, Aug. 1939



Station to Station Mail Traffic Flow

Average Daily Volume, Aug. 1939



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Fortnightly Review

(Continued from page 1)

of the transport airplane. Any expansion program will miss the mark if it does not include large numbers of transports—not just a few score or a few hundred—but thousands of planes suitable for transportation of men and equipment. Should any emergency arise for the U. S. it will not be the Navy and its fleet which settles the issue—it will be the air power translated into fast transportation of men and equipment.

This country is now going to build a second naval fleet, one for the Atlantic. It will cost a terrific sum, something like four billions of dollars. Would it not have been far smarter to spend a billion dollars in long-range Flying Fortresses which can do the work of a fleet—and more? It is sad that the lessons of history are learned so slowly. The Navy has its place, but its place is far subordinated to its past position. Air power is so much more important and yet we, as did England, bumble along spending untold sums for floating steel which has outlived its real usefulness. Give this country an adequate supply of long-range powerful aircraft and no second navy is needed.

In the meantime, we hear gobs of talk about national defense—but the industry that is to build the most important arm of our defense is just waiting. Let's have action.

Germany Trained on Air Mail

IF DEMOCRATIC nations are to hold their own against totalitarian states, they must use the same developmental tools. This is one reason why the Civil Aeronautics Board must look beyond the history books and the rigid rules of tradition when considering air transport expansion in the national interest.

For example, Germany had 45,000 miles of air mail routes in operation in 1938, which is considerably under the 71,000 miles flown by this country here and in foreign countries. But the comparison stops there, for Germany had 104 lines in operation within its own boundaries—a large network for a country smaller than the state of Texas. All mail (letters, postcards, money-orders and newspapers) were carried by air without surcharge if delivery was earlier by this method. Thus Germany not only quickened the speed of internal communication, but she kept planes, pilots and ground crews busy in active training.

One wonders of the future. If Germany retains control of those countries she has invaded, she will be the center of one of the largest air mail systems in the world. She will be in a position to expand her services to South America and to other countries—and at lower rates per letter. This means competition to the United States—competition in a business way.

Germany has not been behind in air transport development. The total volume of mail she carried in a year was far behind the volume carried in the United States, but this is only one side of the picture. She developed and expanded her air mail system and if this country desires to keep on top in air transportation, and to aid its business relations outside its borders—it must strengthen and expand air transportation. It is essential for both national defense and business.

Jerome Lederer

APPOINTMENT of Jerome Lederer to be director of the Bureau of Safety under the Civil Aeronautics Board is a wise move. Mr. Lederer is exceptionally well trained in the subject of air safety and is, indeed, an international authority in this field. His appointment will go far to renew and revive the faith of many that the important work of air safety will go forward with integrity and vigor within the reorganized Civil Aeronautics Board. Friends of the Air Safety Board should be cheered to know that Mr. Lederer will carry on in place of Messrs. Hardin and Allen.

Credit Due Mr. Hinckley

IN ALL of the turbulent discussions about the reorganization of the Civil Aeronautics Authority, the phenomenal success of the Civilian Pilot Training Program has been overlooked in these columns. The safety factor in the CPTP to date has been, in a manner of speaking, a Twentieth Century miracle, and full and complete credit should be given to Robert H. Hinckley for this accomplishment.

Mr. Hinckley began advocating a training program before he became chairman of the Civil Aeronautics Authority. Almost single-handed he presented the arguments before Congress, and in the midst of much skepticism he had the faith and courage to venture forth into a new field of government-sponsored aviation training. When the airlines completed one full year without a fatality there was much justifiable cheering, but the air transport record is to be expected much more than the astonishing record which CPTP has established. To date the fledglings have flown, or shortly will fly, 400,000 hours (or about 28,000,000 miles) with only one fatality, a record so far beyond anything previously established for flight training as to be in a different mathematical world.

But not only in safety has CPTP been a credit to aviation. Instead of creating a vast bureaucracy in Washington along typical New Deal lines, the entire program has been carried out with a minimum of jobholders, and at least the vast majority of those who are connected with the program are people who have been in aviation and are a part of it. On two counts—safety and management—Mr. Hinckley is to be lauded. Even the skeptics are now rooters for CPTP.

The Irony of Economy

ALTHOUGH unpublished fact of much importance is the economical operation of the Air Safety Board since its creation in 1938. With \$380,000 in its budget for the current year which closed June 30, the Air Safety Board is actually turning back to the U. S. Treasury the unexpended sum of \$50,000. It is indeed ironical that a President noted in all history for unrivaled expenditure of money should subordinate the one economically-operated agency in the government by abolishing the office of members of the Board and shifting the agency into the Civil Aeronautics Board. If there have been any agencies since 1933 which actually turned back money to the Treasury they have been very rare; usually they are asking for deficiencies to cover expenditures over and above their budgets. Mr. Tom Hardin and Mr. C. B. Allen could have spent the \$50,000 by loading up the Board with political appointees or friends. Instead, they kept expenditures to an efficient minimum, showing that there is (or was) at least one agency which performed a public job with a sense of responsibility to the taxpayer.

Frogley, AA Press Agent

Directs Dallas Division

Ken Frogley, formerly publicity representative in New York for American Airlines, has been promoted to publicity director of the line's southwestern division with headquarters in Dallas, Tex., according to Edward G. Bern, director of publicity.

Frogley, who was for nine years an editor on the "Los Angeles Daily News," will have charge of American publicity in Texas, Oklahoma, Tennessee and Mexico.

Allison Reviewed

Relating how General Motors' V-type liquid-cooled Allison is going into mass production at Indianapolis, Fortune magazine for July carries an article entitled "1,090 hp. and up—100 a Week."

TWA Occupies LG Hangar

Hangar 4 at LaGuardia Field, New York City, partly destroyed by fire Mar. 5 last, has been rebuilt and is now occupied by TWA.

Wright Heads Consolidated

News, Public Relations Dept.

TWA has consolidated its public relations and news departments with Theon Wright, who for the last year has been system news bureau manager in charge as director of public relations and publicity. He will supervise both departments as one unit and continue to maintain headquarters in Kansas City, Mo.

Leo Baron, New York news bureau manager for the last year, has been appointed system news bureau manager in KC under executive supervision of Wright.

R. I. "Robby" Robinson, New York traffic representative for TWA, will become NY news bureau manager replacing Baron.

Beechcraft for News Coverage

Latest newspaper to order an airplane for coverage of news events is the Atlanta (Ga.) Journal which will spend \$20,000 for a Pratt & Whitney powered Beechcraft.

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Capital Notes

BEFORE CONGRESS RECESSED all legislation necessary to the national defense program as it is now conceived was passed and sent to the President for approval, including bills authorizing a wide variety of preparedness activities and others providing the money to finance them.

In all, Congress appropriated some \$10,500,000,000 to be spent during the year beginning July 1, over 40 per cent of it for national defense, exclusive of millions of dollars in contractual authority.

THE SUPPLEMENTAL DEFENSE APPROPRIATION bill was rushed through during the closing hours, freeing funds for 3,000 additional Army aircraft, \$43,500,000 for Rolls Royce engines to be manufactured by Ford, \$17,000,000 for Naval air stations in the Panama Canal and Caribbean area, and \$32,000,000 for CAA's expanded pilot training program, as well as money for other items totaling over \$1,700,000,000.

LAWS GOVERNING CONTRACTS between government and industry were radically revised in the final week, particularly through a bill (HR 9822) which started out as a measure to speed up shipbuilding operations. But by the time the Senate Naval Affairs Committee had finished with it, the bill had become one of the most important of the session to the aviation manufacturing industry. Principal features include:

Negotiation: The Army and Navy may negotiate contracts for aircraft or parts, plans, machine tools and equipment, as well as for alterations and repair without wasting time on competitive bidding.

Advance Payments: The government may make advance payments up to 30 per cent of contract price, as a device to facilitate industrial expansion and purchase of tools and equipment.

Labor: Walsh-Healey provisions are extended to Army and Navy negotiated contracts, but the stipulations and representations of Section 1 and laws requiring an 8-hour day on Army and Navy contracts may be suspended by the President. Overtime, however, must be paid for at time-and-a-half. Aliens may be employed on secret, restricted, or confidential contracts only upon written consent of the Secretary of War or Navy, under penalty of heavy fine or imprisonment for violation.

Plant Expansion: Secretaries of War and Navy may build, operate and maintain new plants, facilities, buildings or utilities, either by government personnel or through commercial manufacturers under contract, and may later dispose of such plants and facilities as they see fit. Also, they may take over plants if necessary, the Secretary determining the compensation to the owner.

Modification of Contracts: Existing contracts may be modified where necessary to accelerate production.

Sales Abroad: An amendment was added from the Senate floor prohibiting the sale of Army and Navy supplies to the Allies without certification by the Secretary of War or Navy that such material is not "essential" to the national defense. Eliminated was a more rigid provision that the material could not be "useful" to the national defense, which would virtually have barred any effective aid of this kind.

PROFITS WERE SEVERELY CUT in a provision lowering the percentage of profit allowed on government aviation contracts from 12 to 7 percent of contract price on negotiated contracts and 8 percent on contracts awarded by competitive bidding. Further, the law requires that cost of performance be taken into consideration as well as contract price and limits profits on this basis to not more than 8.70 percent in the case of competitive bid contracts.

Explaining this provision to the Senate, Chairman Walsh (D., Mass.) of the Senate Naval Affairs Committee said that originally limitations on both ship and aircraft construction were fixed at 10 per cent, but that "in some mysterious way" the 12 per cent allowance for aircraft slipped in during 1939 "in some Army bill." There was a great deal of talk about "high profits" made by aircraft manufacturers over the past few years and the need for safeguarding the government against undue costs in "preparing to defend America."

GOVERNMENT FINANCING for national defense production was given almost unlimited scope through the bill liberalizing operations of the Reconstruction Finance Corporation. Federal Loan Chief Jesse Jones may use the resources of the RFC to expand existing plants, build new ones, buy equipment and if necessary create and operate war industries under government management. Or he may lease such factories to commercial manufacturers.

Meanwhile, private banking put in a plea for an opportunity to share in financing for defense. Treasury Secretary Morgenthau promised that private interests will have first chance, but pointed out that the government does not expect private business to undertake the risks of supporting enterprises conducted solely for "military purposes."

Expansion of the aviation industry, under the guidance of William S. Knudsen, will follow the release of Federal funds for aircraft orders on July 1. Army and Navy procurement programs are already plotted, with emphasis on filling out existing unused capacity and spreading business, to be supplemented by whatever expansion may then be necessary.

Hundreds of towns are angling for plants and for the new NACA aircraft engine laboratory. Rumors of centralized development in the Tennessee Valley region are met with counter-arguments as to the dangers of moving in too close to the Mexican border. Washington is buzzing with local representatives and rumors.

OTHER LEGISLATION passed or pending raises Naval aircraft strength to 15,000 planes, extends CAA jurisdiction to experimental airmail operations, increases the size of the Air Corps, increases WPA participation in airport construction, regulates cost-plus-fixed-fee contracts, establishes priority as to orders for export, and makes other provisions too extensive to enumerate.

A PHILOSOPHY of national service may not be out of place in this column and in these times. One of America's most successful figures in aviation remarked recently in private conversation that the trouble today springs from the fear that we may have to give up something. "When I started out in life," he said, "I didn't have a thing and I would gladly give up everything I've made if it will help preserve the way of life that offered me the opportunity to make it."



Pro, Con and Otherwise

Hemisphere Defense

Washington, D. C.
June 10, 1940.

To the Editor:

The whole country has rushed into approval of a five billion dollar national defense program, but is somewhat vague as to just what should be bought with all that money.

I, for one, propose that the least expensive defense, and a defense that will write off its own cost, lies in American control of all commercial airline service over the entire Western Hemisphere.

European experience in the last few weeks has shown the value of air transportation entirely distinct from the fighting power of aircraft.

Air transportation is suggested, not merely because it is rapid, but because its total cost, including airways and airports, will be considerably less than the total cost of extending either highway or railway service throughout Central and South America.

The Federal Coordinator of Transportation estimates that the total investment in all airports in the United States is only about one-third of a billion dollars and the total expenditure, investment, maintenance and operation of all aids to civil air navigation run in the neighborhood of only thirteen million dollars a year. The thought that we are merely beginning to utilize this investment is indicated by the fact that domestic air ton mileage is now more than two and one-half times what it was only five years ago.

Extension of such facilities throughout North and South America might involve the spending of a half billion dollars on airports and airways, but such expenditures would provide the Latin American countries with dollar exchange which in turn would enable them to buy American products. In the past we have loaned them money which they were unable to pay because of lack of dollar exchange.

This development might also include the acquisition of present European dominated airlines in South America, and while this might seem to be expensive, it is probably far less so than going to war with any of them.

The Monroe Doctrine prevents extension of European political control of American countries, but you may judge for yourself whether European com-

mercial control of a transcontinental airline is more or less important than European political control of some little South American country.

Statistics published in AMERICAN AVIATION on May 1 show airline costs ranging from 56 to 65 cents per mile for airplanes capable of hauling three or four tons of freight—thus at a ton mile cost lower than railway express and railway first-class mail. None of these airplanes are now hauling freight, but if put into intensive freight service, the cost would go down to a point where volume traffic might be expected.

If all of that five billion dollars is now put into military equipment, there is the possibility that much of that equipment would be obsolete before we are called upon to make use of it. On the other hand, if, say, 10 per cent of the money is put into hemisphere airway development, we acquire the means of commercially profitable use of those airways, thus creating a system of actual HIGH-ways over which military equipment might move at any time that we, most unfortunately, may be required to move it.

A READER.

Col. Robins, Head Officer at Randolph Field, Dies

Col. Augustine W. Robins, 57, commanding officer of the Army Air Corps training center, Randolph Field, Tex., died of a heart attack June 16. He had been in charge at Randolph Field since Mar. 1, 1939.

Early in 1935 Col. Robins was appointed assistant chief of the Air Corps which post he held for four years, at the same time having command of the Materiel Division at Wright Field, Dayton, O.

Obituary

CAPT. ROBERT M. LOSEY, assistant U. S. air attache for Sweden, Finland and Norway, was killed near Dombas, Norway by a bomb splinter.

ROBERT C. PLATT, engineer for NACA, died May 20, from injuries sustained when his sailplane crashed while being auto towed at Newport News Airport, Va.

Boosts Travel

A well known insurance company is spending its own money to promote air travel, according to John O. Briggs, district sales manager for American Airlines at Hartford, Conn. M. B. Brainard, president of Aetna Life Insurance Company at Hartford, Conn., recently elected to United Aircraft Corp.'s board of directors, has prepared a pocket timetable giving airline schedules between Boston and Washington, D. C., and has given it wide distribution in that area.

NEW MEANING...

Shortest-Fastest
Coast-to-Coast4 Engine
STRATOLINERS

Now—TWA adds another "first" to its history-making record of contributions to commercial aviation! TWA Stratoliners—first 4-engine, super-charged cabin airplanes to be placed in commercial service in the United States—open a new era in air travel!

These great new ships span the nation in less than 15 hours, bringing to transcontinental air travel the luxury, speed and reliability proved over the Atlantic and the Pacific.

With luxurious accommodations for thirty-three passengers, crews of five, new refinements and appointments, TWA Stratoliners are truly "Hotels in the Sky"—a new setting for TWA's reputation for hospitality and precision.

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AIR CARRIER RECORD

(C. A. A. Applications, Hearings, Dockets)

All American Aviation Oral Argument

Most important question placed before the CAA by application of All American Aviation Inc. for permission to conduct mail and express pick-up service and passenger operations in seven states is whether the pick-up device patented by AAA holds the answer to the country's feeder line problem. Gerald B. Brophy, counsel for TWA and Eastern Air Lines, interveners, told Authority Members Harlee Branch and Edward P. Warner in oral argument, June 20.

Approval of AAA's application, while not injuring present carriers immediately, would exclude them from future feeder operations with the pick-up equipment to which AAA holds patent rights, Brophy declared, stressing that trunk lines should be given opportunity to participate in feeder developments.

Arguments were devoted in main to the advisory report issued May 21 by CAA Examiner Robert J. Bartoo urging dismissal of the application regarding mail transportation for lack of CAA jurisdiction over experimental air mail routes and denial of the application in other respects because public convenience and necessity had not been proved for carriage of persons and property. Brophy stated that when the examiner found that the public interest did not require the proposed service, he (the examiner) could do little else but admit lack of CAA jurisdiction and refer the case back to the Post Office Dept. which had established the operation. Lack of jurisdiction, he suggested, follows not from use of the pick-up gear, but from lack of need for the routes.

William J. Donovan, AAA counsel, restated that company's aim is to feed traffic into trunk lines rather than to compete for service, then added that the purpose of the Act is not to promote monopoly but to regulate competition. Answering Brophy's charge, Henry A. Wise Jr., other AAA counsel, insisted that All American has no monopoly on pick-up devices, mentioning applications of other companies for certification of service using similar equipment. Position taken by AAA attorneys was that since the PO Dept. has reported favorably on the experimental operations, the CAA does have authority to issue a certificate.

Pennsylvania-Central Airlines and Tri-State Aviation Corp., other interveners, were represented by Frederick Ballard and John W. Crose, respectively.

AA Asks New Stops

Hearing was held June 21 on application of American Airlines for stops at Windsor, Ont., and Niagara Falls, N. Y., on AM7. Complete story on page 21.

Railroad Subsidiary Seeks Airline

Seaboard Airways, railroad subsidiary, on June 21 filed application for routes from Boston to Miami and New Orleans. Complete story on page 10.

UAL-WAE Merger Denied; Interchange Allowed

The CAA on June 19 issued decisions denying application of United Air Lines for permission to merge with Western Air Express, but stated it will allow the two companies to interchange sleeper equipment at Salt Lake City. Complete story on page 12.

United Rate Decision

The CAA on June 22 issued a decision readjusting United Air Lines' air mail pay on AM1, 11, 12 and 17. Complete story on page 21.

PAA Gets New Zealand Certificate

Pan American Airways on June 12 was awarded a certificate for a route from San Francisco to New Zealand. Complete story on page 23.

Braniff Mail Recommended

CAA Examiners F. W. Brown and John Belt on June 13 recommended that Braniff Airways be permitted to transport mail over its passenger-property route between Houston-Corpus Christi and Houston-San Antonio, paralleling Eastern Air Lines. Complete story on this page.

TSA Denied Further Hearing

Trans-Southern Airlines has been denied further hearing on its application for an Amarillo-Atlanta route. Both TSA and Braniff filed applications, and Examiner F. A. Law, Jr., recommended that Amarillo-Oklahoma City be granted to Braniff and that the remainder of the route be denied.

UAL Asks to Intervene in 3 Cases

United Air Lines has asked permission to intervene in the following cases: application of TWA for Los Angeles-San Francisco; Pacific Coast Airways for Los Angeles-Sacramento, and Oregon Airways for Portland-Salem-Albany-Eugene-North Bend-Marshfield-Bend Klamath Falls.

Mail Recommended for Braniff
on Route Paralleling Eastern

Recommendation that Braniff Airways be permitted to transport mail over its present passenger-property route between Houston-San Antonio and Houston-Corpus Christi, an overall distance of 389 miles, was contained in a proposed report released June 13 by CAA Examiners Francis W. Brown and John W. Belt.

The service, if granted, will parallel Eastern Air Lines' AM42 between the points named. Eastern secured the route under the old competitive bidding system of the Post Office Dept. with a bid of \$0.00 per mile as compared with Braniff's bid of a fraction of a cent. Braniff has been flying the line since before the 1938 "grandfather" period, but has not transported mail.

The examiners concluded that the amendment to Braniff's certificate "will aid in the development of a well-rounded air transportation system adapted to the present and future needs of the domestic commerce of

the United States, the postal service and the national defense."

If it can be concluded that Braniff's non-mail service "meets a public demand and aids in attaining the ultimate objectives of the Act, the application should be granted in order that the applicant may have the benefit of government assistance in the form of mail compensation," the examiners said.

Eastern's AM42, the report noted, connects at Houston with the company's AM20 to New Orleans, at which point AM20 connects with the company's AM5 for Atlanta, Washington and New York. "Thus route 42 is a part of a through route by which Eastern provides service between south Texas and Mexican points and the east," it said. "Braniff's operations, on the other hand, between Houston and San Antonio and Corpus Christi are primarily of a local nature to meet the demands of these communities for local transportation facilities." Braniff's application was supported by the Post Office Dept., the report said. Braniff, the report said, "concedes

A Gap is Closed



The gap between Alaska and the U. S. was closed June 20 when Pacific Alaska Airways, subsidiary of Pan American Airways, inaugurated twice-weekly service between Seattle and Juneau. The first flight north carried 671 lbs. of air mail, including 21,250 first flight covers and 8,299 pieces of regular air mail. Seattle-Juneau elapsed time is 7 hrs. 40 min., compared with four days by steamer. One-way fare is \$95, round trip, \$171.

that the present volume of mail transported by Eastern between points here involved is small, but asserts that this is due to the inability of Eastern to provide schedules which will serve the local needs of the territory. Braniff contends that the operation of mid-day schedules, designed to accommodate the local interests, will result in an increased use of air mail. Braniff has been operating the non-mail route at a loss, which in 1939 amounted to \$17,634, without consideration of aircraft depreciation, traffic and advertising, and general and administrative expenses, it was said.

In discussing the convenience and necessity, the report pointed out that among other things there are about 15 military establishments in the territory adjacent to Braniff's routes here involved "consisting of Army and Navy air fields, hospitals, camps and forts, with a heavy concentration in and around San Antonio. Supplies for these forces are obtained through the ports of Houston and Galveston, thus creating a necessity for rapid and easy means of communication between these points."

Hearings End on UAL
Cancellation Suits

After intermittent sessions since Apr. 1938, hearings in the Court of Claims on United Air Lines' suits against the U. S. Government resulting from the 1934 air mail contract cancellations closed on June 11.

Both the Government and United have until Sept. 1 to file proposed findings with Commissioner Richard Akers, and will then be given until Oct. 1 to answer each other's findings. Following this, Commissioner Akers will submit his report and recommendations to the court. Each party then may file exceptions and argue the case before the court, following which the final decision will be handed down. Under this procedure, it probably will be late next year before the case is settled.

The United companies—Pacific Air Transport, Boeing Air Transport and United Air Lines Transport Corp.—filed suits totaling \$3,110,555.43, representing mail payments due for Feb. 1-19, 1934, plus damages on the basis of the canceled contracts. The Government filed counterclaims against United totaling \$23,409,946.23. Paul Godehn, UAL attorney, handled the case throughout for his company. Carl Ristene originally represented the government, but resigned to enter private law practice, and Gen. W. W. Scott finished the case.

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In its one of the United States four routes awarded compensation June 30, After trips were payment shown following per airplane San Francisco San Diego City-Seattle AM17, combined mileage, this mile were made

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CAA Increases United Air Lines Mail Pay; Uses Airplane Mile Basis

Company Had Asked Payment by Pound-Mile; Weight-Credit Trips Abolished; Retroactive Compensation Granted for 20-Month Period

In its first rate decision involving one of the major domestic airlines, the CAA on June 22 readjusted United Air Lines' air mail pay on four routes, effective July 1, and also awarded the company retroactive compensation from Oct. 27, 1938, to June 30, 1940.

After stating that all weight-credit trips would be abolished and that payment would be for all mileage flown with mail, the CAA set the following rates, effective July 1: 18c per airplane mile on AM1, New York-San Francisco; 19c on AM11, Seattle-San Diego; 36c on AM12, Salt Lake City-Seattle-Spokane, and 37c on AM17, Cheyenne-Denver. Rates are based on direct airport-to-airport mileage, but because UAL exceeds this mileage, appropriate allowances were made.

The CAA, however, did not set the rates on the pound-mile basis requested by United. The company had asked 1.08 mills per pound-mile on AM1, 2.46 mills on AM11, 2.16 on AM12 and 1.04 on AM17. If one rate was set for the entire system, UAL asked 1.32 mills. The CAA decision said that such requests, applied to the pound-miles flown in 1938 and translated to a mileage basis, would be 43.21c, 41.75c, 34.10c and 75.91c per mile, respectively.

From Oct. 27, 1938, when the rate application was filed, to June 30, 1940, UAL was given retroactive pay of 31c on AM1, 33c on AM11, 36c on AM12 and 37c on AM17. Under ICC rates, the company was receiving 31c, 27c, 33 1-3c and 29c, respectively.

Rates on AM1 and 11 apply to 300 lbs. of mail or less, plus 7/10 of one cent per mile for each additional 25 lbs. On AM12 and 17, rates also apply to 300 lbs., but payment for 25 lbs. excess is 2 1/2% of the base rates.

Trips Considered

The Authority said that the following trips were required in the interests of commerce, and were considered in fixing the rates: nine round trips between New York and Chicago, one round trip (in addition to the nine) between New York and Cleveland, five round trips between Chicago and Salt Lake City plus one additional Chicago-North Platte trip, three Seattle-Oakland round trips, one Seattle-Portland, eight Oakland-Los Angeles, only those trips required by the Post Office between Los Angeles and San Diego, one Portland-Pendleton trip, three Cheyenne-Denver, and the Seattle-Vancouver non-mail route.

Not considered in setting the rates were: schedules operating via Camden, a Des Moines-Omaha trip, a Sacramento-Oakland trip, and operation of the Boeing School of Aeronautics. Although considering Cheyenne-Denver, the CAA said the Post Office Dept. "had declared the postal importance of the schedules operated on route 17 by heretofore designating them for the carriage of mail, but, . . . it appears that the operations on route 17, with the exception of one schedule, have not in the past been commercially important, and that in the interests of efficient management, they should be

placed, if possible, upon a more profitable basis in the future."

Concerning Seattle-Vancouver, the opinion said that statistics "indicate the existence of some commercial need for air transportation between Seattle and Vancouver, but do not appear to justify the operation of 21-passenger planes. In view of the fact that the Seattle-Vancouver operation represents a long-established route between the U. S. and Canada, we feel that, over a period of time, there may be commercial significance attributable thereto which would not attach to an otherwise similar domestic operation."

School Disregarded

The Boeing School, the opinion said, does not represent a "part of petitioner's facilities which are used or useful in the transportation of mail."

The aggregate mileage anticipated for UAL's approved schedules is 17,269,704, the decision said. In addition, "it appears that on the schedules in effect on May 1, 1940, petitioner will annually operate approximately 5,730,296 scheduled miles represented by other than approved schedules," it stated. "Petitioner has also in the past operated varying amounts of second section mileage, principally in connection with approved schedules, but it appears that sufficient revenues have been realized in the operation of such second section mileage to meet the additional costs incurred thereby." Consequently, the CAA said, it made no allowance for such mileage.

Annual non-mail revenues which UAL may be expected to realize in the operation of its approved schedules (considered by CAA in fixing rates), were given by the CAA as follows: AM1, \$6,184,400; AM11, \$2,037,200; AM12, \$399,700 and AM17, \$24,900. Among yearly expense estimates were: direct flying expense, \$5,359,000; direct flying maintenance, \$1,150,000; direct flying depreciation, \$1,335,000; indirect flying maintenance, \$540,000; indirect flying operations, \$2,700,000; indirect flying depreciation, \$285,000; traffic and advertising, \$1,725,000; general and administrative, \$1,225,000.

A CAA spokesman said that the 17,269,704 airplane miles anticipated under UAL's approved schedules is more than 60% greater than the annual total used in computing payments under the ICC system.

Airlines Increase Service

With the addition of a 5:45 pm. flight from Washington for New York, June 17, American Airlines has increased its round trips between these cities to 13. New southbound flight leaves New York at 5:05 pm.

Boston-Maine Airways on June 14 started operation of a third round trip daily between Boston and Montreal, with intermediate stops at Manchester and Concord, N. H., Montpelier-Barre and Burlington, Vt.

United Air Lines and Pennsylvania-Central Airlines have established 4 1/2 hours service from Washington to Chicago via the Cleveland gateway. The flight, called the fastest Washington-Chicago air service, leaves Washington at 5:15 pm., arriving at 8:30 pm.

Capitol Ceremonies



Airline district traffic and sales managers of Washington, D. C., who established the U. S. Capitol Airlines Ticket Office. Left to right: Herbert D. Ford, American Airlines; Donald A. Duff, Pennsylvania-Central Airlines; Robert S. Littell, TWA; William D. Briggs, Eastern Air Lines; Gordon MacLaren, Northwest Airlines (visiting from New York), and D. Walter Swan, United Air Lines.



Congressman Jennings Randolph (D., W. Va.), at left, and Congressman Dow W. Harter (D., Ohio), center, officiated at ceremonies marking the opening of the U. S. Capitol Airlines Ticket Office. New manager of the office is Charles O. Brahler, shown at right.

AA Asks Windsor, Niagara Falls Stops

Hearing was held June 21 on the application of American Airlines for inclusion of Windsor, Ont., and Niagara Falls, N. Y., as intermediate stops on AM7, New York-Chicago. Northwest Airlines was present at the hearing as intervener.

Ralph Damon, AA vice-president-operations, told CAA Examiner Thomas Wrenn that his company's primary purpose in wishing to serve Windsor is to make connections at that point with Trans-Canada Air Lines. The latter company is expected to inaugurate Toronto-Windsor service about Aug. 1. If TCA does not operate such service, AA probably will not wish to fly into Windsor, he said.

No additional equipment will be needed to serve the two cities, the witness said, pointing out that the company's regular course now comes within 10 miles of them. Because of short runways at Niagara Falls, however, service into and from that point necessarily will be subject to gross load and weather limitations, he added.

Charles Rheinstrom, AA vice-president-sales, also stated that Niagara Falls can be served at present but that operations would not be "entirely satisfactory." He said that present trips, and not new flights, will serve the two cities. Schedules at Windsor will be timed to connect with TCA, he explained.

Croil Hunter, president of NWA, testified that his company has filed application for Chicago-Windsor-Niagara Falls-New York, and that any service into those intermediate cities by AA would be "highly competitive."

Brief testimony also was given by F. B. Downing, manager of Niagara Falls airport.

Cockrell to Cheyenne

W. S. Cockrell of Chicago has been named maintenance inspector for the CAA in the Rocky Mountain region with headquarters at Cheyenne, Wyo., succeeding C. C. Chamblin who died recently.



New Scenic Air Route Traverses Vast Vacation Area

THE map above shows in detail the vast wilderness playground now served by Western Air Express. The line bending to the eastward is the new scenic route from Salt Lake City to West Yellowstone, via the Grand Tetons, Jackson Hole and Old Faithful. Prominent newspaper men and aviation experts who traveled this route on a special guest flight, unanimously pronounced it one of the world's greatest scenic air trips. The map also shows the location of some of the most prominent dude ranches and the best trout fishing areas.

Western Air Express operates two schedules daily between Salt Lake City and Great Falls, in addition to the Scenic Special direct to Yellowstone Park. There is also a special 30-minute flight over the Park (small loop on map) from West Yellowstone each afternoon.

Word Portrait of a Dynamo

George Chapline
Vice President, Wright Aeronautical Corp.

IF ONE wished to paint a terse word picture of George Chapline, one would find no adjective in Webster's learned work more apt than "dynamic"—and yet even that would fail adequately to portray the well-known vice-president of sales of Wright Aeronautical Corp. "Dynamic" would give the verbal portrait its predominant color but to bring out the background tones there would have to be added "gracious," "appreciative," "analytical," "well-informed," and a few others.

Those who know him, and throughout the country their number is legend, George Chapline has, during the 10 years he has been associated with the commercial phase of aviation, built up a reputation for inexhaustible energy, ability and sociability second to none.

A former lieutenant-commander in the U. S. Navy and a Navy pilot with all the intimate knowledge of flying and its problems which his Naval rank implies, his service record, replete with accomplishments, is clearly illustrative of the methods followed by the Navy in developing those qualities of leadership and organizing ability which have made Naval officers so valuable in the commercial aviation industry.

Intimately acquainted with business conditions not only in this country but in Europe, South America, and the Near East as the result of extensive travels, trained in aeronautical engineering through post graduate work at the U. S. Naval Academy and Massachusetts Institute of Technology, and thoroughly appreciative of shop practice through assignments during his service career, Chapline has risen to vice-president in charge of sales and service of Wright Aeronautical from director of service in the last 10 years.

Chapline was born at Lincoln, Neb., where he received his early education in the elementary and high schools of that town. In 1912 he entered the United States Naval Academy at Annapolis and was graduated in 1916. It is interesting to note that a brother, Vance Chapline, who had preceded him to Annapolis, is now a Navy captain. While a midshipman, Chapline made two extended European training cruises covering the Mediterranean and Northern European ports which gave him an insight on conditions in Europe prior to the first World War.

Upon graduation from the Naval Academy in June 1916 he was commissioned ensign and was selected as

one of the original officers to man the U. S. S. *Arizona*, which, commissioned in October 1916, was the Navy's newest dreadnaught at the time. Here he assumed command of a three-gun, 14-inch turret which made the highest record for its type in the annual gunnery competition. Chapline remained aboard the *Arizona* for a period of three years, which period included our participation in the World War, and received his promotion to lieutenant junior grade in Oct. 1917 which was followed on Jan. 1, 1918, by a promotion to lieutenant senior grade. Upon his return from Europe on Dec. 26, 1918, he was among the officers and Navy enlisted men who were reviewed by the Secretary of the Navy. Chapline accompanied the *Arizona* to the Near East where it had been assigned to protect the rights of American citizens during the disturbances at Smyrna, Turkey. Stationed in Half Moon Harbor at Smyrna, Chapline observed the landing of 20,000 Greek troops and the resultant battles which play a prominent part in history.

During his assignment aboard the U. S. S. *Columbia*, Chapline was selected for training in aviation and detailed to the Naval Air Station at Pensacola, Fla. His interest in aeronautics which led him to seek flight training dates back to his first year at Annapolis in 1912 where he observed the Navy's pioneering aviation activities—Annapolis being the Navy aviation center at the time. At the conclusion of his training period he remained at Pensacola and was placed in command of the old N-9, or elementary training squadron where all Navy aviators received their elementary training at the time.

It was during this period that Chapline assisted Comdr. Dodd and the late Lt. Comdr. Rodd in experiments with early radio homing devices installed at Pensacola in a H-16 type Navy Patrol Boat, acting as pilot throughout these tests. These flights were made from a distance at sea and terminated at the Naval Air Station.

In 1922, Chapline returned to Annapolis for post-graduate work in aeronautical engineering. This was supplemented by a year as executive assistant to the works manager at the Naval Aircraft Factory at Philadelphia where he came into intimate contact with shop practices, aircraft manufacture and engine repair and maintenance.

Later, he was assigned to the Mas-

Three Times Weekly



Increased activity at Pan American Airways base at LaGuardia Field New York, is indicated by this view of four Clippers lined up, preparatory to inauguration of a third weekly trip to Europe, which began June 18.

sachusetts Institute of Technology for further post-graduate for Masters Degree courses in aeronautical engineering, completing this work in 1925. He then returned to Annapolis again to organize an aviation ground school course for midshipmen, which was made part of the curriculum at the Naval Academy.

When this task was successfully completed, Chapline put in a short tour of duty at the materiel division of the Army at old McCook Field, Dayton, O., as a liaison officer. Late in 1925 he was again transferred to sea in charge of aviation details aboard the U. S. S. *Maryland* and later the U. S. S. *California*, battle fleet flag ship. Here he had charge of planes operated for gunnery, scouting, and observation purposes launched from catapults and landed at sea abreast the fleet operating area. He continued his sea duty stationed aboard the aircraft carrier U. S. S. *Langley* where he organized and later commanded the first fighting plane squadron (Fighting Plane Squadron No. 2) employing enlisted pilots; all previous squadrons had been entirely manned by officer pilots.

In June, 1927, Chapline was commissioned lieutenant commander. His command, of Fighting Plane Squadron No. 2, was in September based aboard battleships of the battle fleet, he as commanding officer returning to the U. S. S. *California*, the flagship.

The spring of 1928 brought a transfer to the Navy Dept. at Washington where he was assigned to the planning division of the Bureau of Aeronautics. His particular duties in this position consisted of following the military characteristics of planes under development and of the planes on the Navy's experimental program. While at the Bureau, he flew a Keystone Amphibian in the Curtiss Marine Trophy Race, finishing among the leaders.

In June 1929, Chapline resigned from the Navy to become director of service of Wright Aeronautical. Accompanied by Comdr. Bruce G. Leighton, director of sales and service, he flew the Wright company's Whirlwind-powered tri-motored Ford in a border-to-border, coast-to-coast, 40-day air tour of the U. S. The purpose of this air tour was a survey of aviation conditions throughout the country and through this medium Chapline obtained intimate knowledge of the problems of commercial aviation.

The Wright tour was followed by the National Air Tour during which he was also at the controls of the tri-motored transport. The Ford tour of 1929 lasted 28 days. All told Chapline flew more than 30,000 miles during his first year with Wright Aeronautical and landed in 42 states of the Union as well as points in Canada.

In 1930, Chapline was elevated to the position as assistant director of sales and service and in 1933 became sales manager of the company, the position he held until elected by the board of directors of Wright Aeronautical to vice-president in charge of sales. His rise from director of service in 1929 to vice-president in 1935 is a testimonial to his management of the sales and service department.

Aero Bookshelf

AIRCRAFT MAINTENANCE, by Daniel J. Brimm Jr. and H. Edward Bogges; Pitman Publishing Corp., 2 W. 45th St., New York, N. Y.; 49c pp.; \$2.50.

This book, in my opinion, contains the most complete and comprehensive instruction I have seen on the maintenance of aircraft structure, covering wood, fabric and metal airplanes. It might be used either in connection with ground school courses pertaining to the maintenance of aircraft structure or as a textbook by skilled mechanics, as it describes in detail how the work should be accomplished and includes much data of material value.

Frank E. Caldwell

SKY ROADS, by Ernest K. Gann, Thomas Y. Crowell Co., 393 4th Ave., New York, N. Y., 124 pp.; \$2.

Here's a book the family will be battling over, because it holds appeal for the old man and the kid in school alike. Ernest Gann, first officer on American Airlines, hasn't been an aviation enthusiast all his life. He yearned for histrionic talent while at Culver, played on Broadway after being graduated from Yale, and wrote what he himself terms incredibly bad plays which were never produced!

Then he went to Hollywood, didn't like it, and bought an airplane, and he



First Officer Ernest K. Gann, American Airlines, author of "Sky Roads"

hasn't been far from flying ever since. That's all he wants to do. Except, of course, to write this decidedly entertaining book which skips briefly from the earlier days of flying to airline operation routine as it is practiced today.

If you want to know what makes an airline tick, read Gann's story. If you want to ride with the pilots in an airline cockpit, read his yarn. Well illustrated, it's one you'll read, put down, and then pick up and read again. And it doesn't make American Airlines mad to be identified as Ernest Gann's boss!

A. H. S.

AIRCRAFT YEAR BOOK FOR 1940, edited by Howard Mingos. Published by the Aeronautical Chamber of Commerce, 30 Rockefeller Plaza, New York, N. Y. Profusely illustrated. 22d Annual Edition. 332 pp.; \$5.

The twenty-second annual edition of the Aeronautical Chamber's year book maintains the high standard of the past. As before, it is a complete word picture of aviation in 1939 with more than the usual significance.

Mr. Mingos' comments on the present war have punch and common sense. If anything, the new edition is more comprehensive in scope than previous editions.

For a summary of air transportation, aircraft, aircraft engines, airports, accessories, statistics—whatever it is, the chances are the answer is in this reliable volume. To say more would merely be repeating what we have said about earlier editions.

W. W. P.

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San Francisco-New Zealand Route Awarded to Pan American Airways

Issuance of a certificate of convenience and necessity to Pan American Airways Co. (Nev.) for a route from San Francisco to Auckland, New Zealand, via Los Angeles, Honolulu, Canton Island and Noumea, New Caledonia, was announced June 12 by the CAA. Under terms of the certificate, PAA will not be permitted to transport local traffic between points in the continental U. S.

In his proposed report on the application, CAA Examiner F. W. Brown had recommended that because PAA already operates San Francisco-Honolulu, the New Zealand certificate should start at the latter point. He also stated that a Los Angeles stop was not required. The CAA, however, started the line at San Francisco and allowed the Los Angeles stop.

Despite the additional cost, "we find that the significance of the proposed service to the national interest, and especially to the national defense, justifies the designation of Los Angeles as an intermediate point," the CAA said. Inclusion of the city would cost \$51,000 during the first year, when it would be served westbound only, and \$65,000 during the second year, with service in both directions. These additional costs could be met by revenues resulting from two additional through passengers and one additional Honolulu passenger, or from one additional through passenger and three additional Honolulu passengers originating in that city, the CAA said.

At present, steamer connections between the U. S. and New Zealand and Australia take 17 days in transit and are limited to one round trip per month, the CAA stated, pointing out that PAA's service will shorten the time to 4½ days and will be inaugurated on the basis of one round trip each fortnight.

PAA sought the certificate under the "grandfather" clause, stating that it did not operate schedules during that period because of conditions beyond its control (loss of Samoan Clipper, Jan. 11, 1938). The CAA refused this application, but found that the public convenience and necessity required the route.

Pilot Blamed for UAL Rock River Accident

The Jan. 11 crash of a United Air Lines Douglas sleeper on the Rock River at Moline, Ill., was probably due to the "action of the pilot after overshooting the landing area in attempting to pull up and make another approach, which maneuver was beyond the capacity of aircraft NC18105 under existing conditions with only one engine operating," according to an accident report issued by the Air Safety Board recently.

The captain and first officer sustained minor injuries, while the five passengers and stewards were unhurt. Damage to the plane was major.

Contributing factors were given by the ASB as (1) failure of the left engine in flight, and (2) failure of Capt. Charles Wheeler to orientate himself properly before making an approach for a landing at the Moline airport.

Recommendation was made that the CAA "require all scheduled air carriers to remove master rod bushings and articulated rod bushings during all major engine overhauls and make Magnaflex inspections of all affected surfaces for corrosion pits and cracks."

The plane's left engine failed 10 miles west of Iowa City due to the failure of the strap section on the piston pin end of the master rod in the front bank of cylinders, the report said. Capt. Wheeler elected to return to Moline and became con-

In finding PAA fit, willing and able to perform the service, the decision pointed out that PAA will transfer one of its four Boeing 314's from trans-Atlantic service to the route. When the six new Boeing 314-A's are delivered in 1941, the other 314's will be transferred to the Pacific for use both to Hong Kong and New Zealand.

On the cost of the service, the decision said: "On the basis of the additional costs which would be incurred over and above those incident to the operation of applicant's San Francisco-Hong Kong service, applicant estimates that the operating costs of the proposed service will approximate \$1,459,500 during the first year, and \$1,492,836 during the second year of operation. The additional expenses so estimated include direct expenses . . . and indirect expenses."

"On the basis of there also being allocated to the New Zealand service a proportionate part of the cost of operating the existing San Francisco-Hong Kong service due to the joint use of facilities and personnel by the two services, applicant estimates that the cost of the New Zealand service at \$1,773,167 for the first year of operation. This would involve a transfer from the San Francisco-Hong Kong service of an allocated sum of \$313,667 out of the costs now borne entirely by that service."

"Revenues derived exclusively from the operation of the service between San Francisco and Auckland are estimated by applicant at \$442,836 during the first year of operation and \$512,580 during the second year, exclusive of U. S. mail pay . . . Treating all anticipated revenues from the New Zealand service and the existing Hong Kong service derived from local U. S.-Honolulu traffic as being revenue common to both services, and allocating them between the two services on the basis of the comparative payload available for commercial traffic on the aircraft to be utilized on the respective services, applicant estimates the anticipated revenue on the New Zealand operation, exclusive of U. S. mail pay, at \$413,925 for the first year of operation."

fused as to directions after breaking through the overcast, making an approach for a landing at Moline in a northeasterly direction when he thought he was landing northwesterly, it explained. After discovering the error in direction, Wheeler applied full power to the operative engine to make another approach, but could not gain sufficient altitude to clear obstructions. The plane struck the top of a tree and settled onto the ice-covered Rock River.

Upon disassembly of the left engine the ASB said it found that the front bank of the power section was completely demolished and that the connecting rods were all broken loose from the pistons. The National Bureau of Standards report stated that "although the failure occurred only 13 hrs. and 45 min. after Magnaflex inspection failed to disclose a crack, it is likely that the crack was present at the time, but escaped detection because the wrist pin bushing had not been removed from the rod . . . It is the opinion of this Bureau that the bearing bushings and sleeves should be removed for Magnaflex inspections of the rods to permit the bearing surfaces to be examined for corrosion pits as well as for cracks."

Weaver From UAL to Boeing
Boeing Aircraft Co. shortly will announce appointment of C. B. Weaver as an executive. He has been superintendent of maintenance for United Air Lines.

Eastern Promotes Davis and Parker

Appointment of Capt. F. E. Davis as superintendent of flight training and Capt. Erion H. "Pete" Parker as operations superintendent of the eastern division, has been announced by Sidney L. Shannon, vice-president—operations, Eastern Air Lines.

Capt. Davis will develop and supervise the company's flight training program, develop new flight equipment and coordinate with the engineering



Davis

Parker

and maintenance personnel in all matters involving procurement and development of new flight equipment. He will be based at LaGuardia Field, New York.

As superintendent of operations, eastern division—from New York to Miami—Capt. Parker will be in charge of all flight personnel flying between Miami and Atlanta. Capt. Harry H. Pabst, western division manager, will continue in jurisdiction of the Atlanta-Miami segment of EAL's routes.

Capt. Davis for the last three years has served as check pilot. Capt. Parker joined Pitcairn Aviation Inc., predecessor company of EAL, in 1929.

Tests on 24-Hour Basis

Engine test runs at the Army Air Corps' materiel division at Wright Field are going on a 24-hour basis at once, it was announced recently. The division has seven torque stands, with two larger ones under construction.

Airline Personnel

San Hadden, clerk in the operations office of United in Chicago, has been transferred to Denver as assistant to C. M. Wall, station manager. He is succeeded in Chicago by R. J. Miesse, transferred from New York.

New sales representatives in TWA's Washington traffic office are J. Wilson Reed of Washington and Dave Hightower of Kansas City, Mo. New reservations and sales representatives are Elmer M. Bryan of Philadelphia, Frank William Dunn of Washington, and L. Denton of Birmingham, Ala.

W. A. Campbell of United's dispatch department in Burbank, Cal., has become station manager at Bakersfield, succeeding R. J. Schatz who has been transferred to station manager at Walla Walla, Wash.

WAE's traffic department awarded Capt. Allan A. Barrie and Joseph O'Neill, station manager at Salt Lake City, annual traffic department awards for service outside their line of duty.

Floyd L. Aker has been promoted by Inland from reserve captain to captain with headquarters at Cheyenne, Wyo. Helen Marion of Montreal, Que., one of the original five stewardesses hired a year ago by Canadian Colonial, has been promoted to the position of chief stewardess instructor, it was announced by F. L. Duncan, vice-president-operations.

Margaret McNamara has become the first full-time woman counter salesman on United's system. She was promoted to this post in the Seattle traffic office after serving three years as stenographer and switchboard operator.

F. V. Army, recent graduate of Boeing School of Aeronautics, has been employed by Northwest as meteorologist at Spokane.

New TWA first officers are R. L. Pusey, John E. Harrington, William A. Perrin, Allan B. Lullman, William M. Flanagan, Floyd Valentine, C. J. Messer and Robert B. Mueller, all based at Kansas City, Mo.

Sydney D. Smith has been transferred by Pan Am from New York to Chicago where he headquarters in the district traffic office at 114 S. Clark St. Eric D. Murphy has been added to the ranks of Inland's first officers who headquarters at Cheyenne, Wyo.

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Edited by Howard Mingos

22d Annual Edition

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Air Safety Board, CAA Clash Over Beechcraft Restrictions

In what it termed "a final effort to safeguard the flying public," the Air Safety Board, "after striving in vain" to get CAA action on its recommendation of May 24 to ground all Beechcraft bi-planes "because of a disastrous series of structural failures in flight," on June 10 made public its recommendations and correspondence to the CAA on the subject.

The CAA immediately issued a statement explaining that "flutter," the alleged cause of several accidents, can occur only within certain small ranges of speed, and that all Beechcraft owners of types affected had been informed by wire not to fly at more than 160 mph. in smooth air, 140 mph. in rough air, and to do no instrument flying. These limitations were "as effective as the drastic and unnecessary grounding order" recommended by the ASB, it said.

On June 12, the Beech Aircraft Corp. announced that it felt that the "fundamental problem is that of safety education for pilots." The company said that a series of fatal accidents has occurred to pilots who were not trained in instrument flying and who were not rated as qualified instrument pilots by the CAA. All the accidents, it added, occurred while the pilots were attempting to fly their airplanes blind in bad weather.

ASB correspondence stated that a fatal Beechcraft accident on June 4 "would have been avoided if the Authority had acted promptly to effectuate the Board's recommendations of May 24." It also said that the CAA has been "wholly unwarranted in allowing the continued use of this type aircraft either by private owners or charter operators catering to an unsuspecting public," pending the outcome of a recheck of the airworthiness of Beechcraft bi-planes which is being conducted by the NACA at the request of the ASB.

The Board's May 24 recommendation was that the CAA take immediate steps to ground all Beechcrafts having the same wing and alleron structure as those involved in accidents on May 10 and 19, pending an investigation of failed parts and completion of vibration tests on a similar plane. Independent vibratory and flight tests by the NACA also were asked.

On June 6, ASB members Tom Hardin and C. B. Allen in a letter to the CAA remarked that 10 days had elapsed without CAA action and that on June 4 another Beechcraft "disintegrated in flight" near Catskill, N. Y., killing Wallis C. Bird, prominent New York flier. "His death clearly would have been avoided if the Authority had acted promptly to effectuate the

Board's recommendations of May 24," Hardin and Allen said. They added that the Board itself had taken steps to have the NACA conduct tests.

"We are compelled to call your attention once again to the fact that a large number of airplanes of this design are currently being flown in the U. S. and other parts of the world," Hardin and Allen said. "We believe that acquiescence in their continued use by the government agency which has publicly attested to their airworthiness is a definite menace to the safety of the flying public and a hazard that should be eliminated without further delay."

In answering the ASB, the CAA stated that the former's statement "would give the impression that the Authority has taken no action in this matter. The fact is that the Authority took action immediately upon receipt of the Board's report to insure against the danger of recurring accidents to these planes." The May 24 recommendations "clearly referred to Beechcraft of the so-called E-17 and F-17 types," it said, adding that on May 25 owners of all such types were informed of the limitations. "On May 26 the Authority had its own E-17 Beechcraft flown to Wright Field for a complete flutter test in the Air Corps' research laboratories."

Concerning the June 4 crash, the CAA said that the plane was a D-17 type and not covered by the ASB recommendations. "However, on June 6, a few hours after receipt of the Safety Board's letter on this accident, the Authority wired the owners of all Beechcraft of types B-17, C-17 and D-17, imposing the same limitations of speed and use previously placed on the newer models," it stated.

Beech Aircraft Corp. pointed out that many of its planes have been flown in air races and that none of them "ever encountered any structural difficulty even though some of them were considerably overloaded with long-range fuel tanks." In South America, Beechcrafts fly regularly "through the most violent kind of instrument weather over great mountain chains, almost daily. Their pilots have experienced no difficulty because they are highly skilled and know exactly what they are doing at all times. This should indicate that it is not the turbulent air which destroys the Beechcrafts, but the mis-handling by the inexperienced pilots after encountering rough air while attempting to fly on instruments."

The company also stated that "the pilots who were involved in the fatal accidents were breaking the rules of the CAA by operating their airplanes blind without possessing a pilot's instrument rating. These rules are set up to protect pilots and passengers from just such occurrences. As is well known to experts, an untrained pilot trying to fly blind can easily become involved in high speed maneuvers and can, as a result, subject the structure of the airplane to overloads which it cannot be designed to resist.

"Beech Aircraft Corp. made a plea to members of the Air Safety Board to take steps to educate pilots to the dangers of attempting to fly blind without adequate instrument training, and it also sent a bulletin to all known pilots of Beechcrafts warning them against the dangers of any attempt at blind flight by non-qualified pilots. However, no manufacturer can be expected to carry on an educational program for all the pilots in the country."

Airline Study Prepared

A study entitled "The Air Lines" has been published by Stern, Wampler & Co. Inc., 231 S. La Salle St., Chicago, Ill.

Washington Financial Review

SEC Registrations

HAYES INDUSTRIES INC.

Registered are 30,597 \$1-par common shares, with Van Grant & Co. underwriting 25,597 and Brown, Schlessman, Owen & Co. taking 5,000 shares. Stockholders are selling 15,597 of the registered shares to Van Grant & Co. for \$103,876. Hayes Industries Inc. selling 15,000 shares for \$99,900. Public price was to be announced by amendment.

Net proceeds to company of \$95,596 will be used for a new \$40,000 building, brake testing equipment, machine tools, and to retire on July 1 all preferred stock (\$26,880). Company occupies one-story plant of 61,268 sq. ft. at Jackson, Mich., manufacturing automotive and aircraft parts, latter including wheels, brakes, tail wheels & axles, beaching gears for flying boats.

Certain officers & directors (including C. B. Hayes, president) own control of Aeroquip Corp., Michigan firm now in organization, to sell aviation & automotive products. Hayes officials also hold 1,573 of 4,400 outstanding shares of Lake State Products Inc., which is engaged in subcontract work, some of it for Hayes.

Apr. 30 balance sheet shows assets of \$950,888; current assets \$638,127 (inventory \$282,790; trade accounts receivable \$312,866). Property, plant, etc. \$299,170. Current liabilities \$239,465. In nine-months ended Apr. 30, sales

were \$1,881,723, and net income was \$71,966 (against \$138,123 in year ended July 31, 1939).

Current SEC Reports

GENERAL MOTORS CORP. reports it holds 100% voting control of Alliance Engineering Co., Indianapolis (100 outstanding shares, of \$100-par common). The corporation owns 22.7% of the voting stock of Bendix Aviation Corp., and 29.1% of the voting stock of North American Aviation Inc., all as of Dec. 31, 1939.

E. I. du Pont de Nemours & Co. in Mar. 1, 1940, owned 10,000,000 shares of General Motors' common stock, or 23.3% of the class.

BOEING AIRPLANE CO. states as May 10 there were outstanding 720,000 shares, to whose holders were offered for subscription 360,486 shares. Total of 272,232 shares were taken, leaving 88,248 remaining for underwriters, who received commissions of \$288,388. Aggregate proceeds to company from sale of the 360,486 shares, after commissions, will be \$5,479,547. (Original registration statement appeared in Financial Review of AMERICAN AVIATION June 1.)

AIR ASSOCIATES INC. on May 7 formed Air Associates Inc., a New Jersey corporation, with capital of 1,000 \$1-par shares, of which 1,000 have been issued, all to parent company (Company will move to Bendix, N. J., shortly).

Wright Aeronautical Dedicates Huge Plant to Make 1,000 Engines Monthly

Wright Aeronautical Corp. dedicated at Paterson, N. J., on June 18 one of the largest plants ever constructed under one roof, and Guy Vaughan, president of Curtiss-Wright Corp., told the large gathering at the exercises that 1,000 aircraft engines a month would be built in the new plant when it is in full production.

Designed by Albert Kahn and erected in the record time of 57 days, Plant No. 2, as it is called, comprises 124 acres under one roof. Parts of the plant have been in use since January but full-scale production is now getting under way. A Flag Day parade and celebration was held in connection with the dedication with civic leaders, the Army Air Corps and company officials participating.

Opening of the plant increases Wright Aeronautical's plant facilities from 1,000,000 sq. ft. last year to 2,200,000 sq. ft. at present. This includes the leasing of a factory as well as Plant No. 2 which has 540,000 sq. ft.

On June 18 the company announced the purchase of 30 city lots near its original plant on which additional facilities for testing engines and other buildings will be erected.

Other of the Curtiss-Wright divisions have also expanded greatly within the last year or two. Curtiss Aeroplane Division at Buffalo, N. Y., has tripled its production, while Curtiss Propeller Division at Clifton, N. J., has increased its facilities from 17,000 to 220,000 sq. ft. in two years.

GOVERNMENT CONTRACTS

Awards of \$25,000 and Over

Release Date Shown

NOTE: Because of the increasing volume of government purchases, this column hereafter will include only awards of \$25,000 and over, with the exception of aircraft contracts which will appear regardless of amount.

AIRCRAFT

Cessna Aircraft Co., Wichita, Kan., 6/14, airplanes, \$90,563 (CAA).

ENGINES, PARTS, ACCESSORIES

Hamilton Standard Propellers Div., United Aircraft Corp., East Hartford, Conn., 6/14, propeller assemblies & controls, \$238,280 (Air Corps).
Hamilton Standard Propellers Div., United Aircraft Corp., East Hartford, Conn., 6/14, propeller assemblies & controls, \$31,500 (Air Corps).
Wright Aeronautical Corp., Paterson, N. J., 6/14, maintenance parts for engines, \$258,320 (Air Corps).
Ranger Aircraft Engines, Fairchild Engine & Airplane Corp., Farmingdale, N. Y., 6/15, aircraft engines, \$5,489,308 (Navy).
Grumman Aircraft Engineering Corp., Bethpage, N. Y., 6/17, airplane parts, \$29,169 (Navy).
Pioneer Instrument Div., Bendix Aviation Corp., Bendix, N. J., 6/18 indicators & transmitters for B-17C airplanes, \$31,920 (Air Corps).

MISCELLANEOUS

Switlik Parachute & Equipment Co., Trenton, N. J., 5/9, parachutes & spare parts, \$378,140.40 (Air Corps).
Moore Construction Co. Inc., Panama City, Fla., 5/9, runways & drainage at Naval Air Station, New Base Field, Pensacola, Fla., \$206,618.50 (Navy).
Ward Construction Co., Charleston, W. Va., 5/9, photographic laboratory, MacDill Field, Fla., \$39,400 (War).
American Builders, Seattle, Wash., 5/11, sectional buildings, \$52,905 (CAA).
DeLuca & Son Inc., San Francisco, Cal., 5/11, additions to hospital, MacDill Field, Cal., \$30,740 (War).
A. J. Honeycutt Co. Inc., Birmingham, Ala., 5/11, fire station & guard house, MacDill Field, Fla., \$67,980 (War).

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TWA
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STOCK COMMENTS

By Philip P. Friedlander

It is to ignore fundamental developments to assert dogmatically that because aviation securities have failed to keep pace with the general stock market that this portends much lower value for aviation stocks and bad times ahead for the industry. For the story is not all told by immediate average comparison. True, the popular Dow Jones Stock Industrial Index is about 12 points above recent depressed values, and the airplane averages are now selling close to newly-established lows. But this is only the reflection of the engulfing uncertainties that have developed.

France capitulates but the world does not know its terms. The British Empire unofficially asserts she will take over all the aviation orders that were given by her former ally; but then the major question of what lies ahead for England. Can she stand-off these powerful foes? And, if the worst happens, will the Federal government assume these orders?

To add to the confusion, restrictive measures are introduced in our Congress limiting profits on all defense contracts. How will these bills finally work out?

Unquestionably the defense program means large orders for all our aviation plants. Wall Street sources say that within the next 10 days an order for 5,500 planes will be given by the Gov-

ernment and that most of this will be for training ships. The new \$5,000,000 program for defense will naturally provide a large share for airplanes. While our demands will permit priority to the English as long as they are able to coup with the dictators, big orders will be rushed to the industry in order that large scale production can be attained. Surely the intelligent insistence of William S. Knudsen, production chief of the defense commission, that to expand the industry rapidly large orders must pour into the plants, will be heeded. This guaranty of sufficient business will assure activity for some time ahead and bring about the expansion that the world situation demands.

The set-up as revealed suggests that at the moment the aviation manufacturing companies which are located in the interior of this country will be the first beneficiaries of the new orders. These are the smaller companies and their equities are selling at reasonably low prices. Most of the manufacturers whose plants are located in the central western part of the U. S. turn out training ships for pilots. There will be a demand for about 4,500 ships of this type.

It will be recalled the airline companies securities sold up to rather high levels during the latter part of April and around the first part of May. Since

Cuff Increases Efficiency

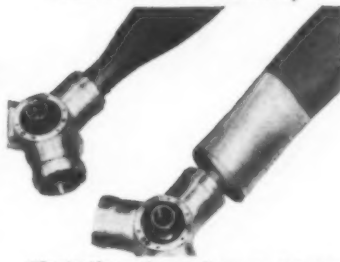


Illustration shows how a conventional type of Curtiss Electric propeller looks before (upper left) and after (lower right) being equipped with the new blade shank cuffs developed by Curtiss Propeller Div. of Curtiss-Wright Corp., Clifton, N. J., and now installed on many aircraft types of the Army Air Corps and the Navy. The cuff, of sheet aluminum alloy, continues the airfoil section of the blade to the hub, thus streamlining the blade shank. Through the use of cuffs, cylinder temperatures of aircooled engines can be lowered, takeoff thrust increased and blade shank drag of high speed installations reduced.

then these securities have depreciated along with the rest of the market. Reports coming in show that these companies are doing tremendous business and increases are shown in their

Incidental Intelligence

When flying between Washington and Buffalo aboard a Pennsylvania-Central Airlines plane, you'd be pretty safe if you just call the pilot, "Jimmie." Five of the captains assigned to this run were christened "James"—they are James Gott, James Rinker, James Franklin, James Graham and James Shutt.

reports all along the line. It appears that these stocks have been thoroughly liquidated. On any general market weakness this group should be singled out for speculative venture.

The general aviation averages have an interesting implication. A low of 36.50 was established during the week ended May 15. Despite the uncertainties prevailing, and despite intermittent liquidating spells, recent weaknesses, up to this writing, failed to penetrate this low point. The averages have backed and filled between 38-40 running up summarily at one stage to a high of 42 only to erase this favorable indication by retreating to 37. A long line has been built-up by this process. This does signify a move of some distance when the major swing materializes. At 43 there will be flashed a bullish signal for an advance; at 36, a bearish signal, for lower prices.

It is well to stress that the aviation manufacturing companies, despite recent Congressional developments, must and should have governmental backing for expansion. This will be reflected in due course in the prices of aviation securities.

Big Navy Award to Fairchild

Ranger Aircraft Engines, Division of Fairchild Engine & Airplane Corp., Farmingdale, N. Y., has been awarded a \$5,489,308 contract for an undisclosed number of aircraft engines, it was announced June 17.

Aircobra Rights to Northrop

Northrop Aircraft Inc. has acquired manufacturing rights from Bell Aircraft Corp. for the Aircobra pursuit following conferences with the Allied Purchasing Commission.



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CONTINENTAL
AIR LINES

America's Fastest

NEW YORK STOCK EXCHANGE

	Week Ended June 8				Week Ended June 15				Week Ended June 22			
	High	Low	Change	Sales	High	Low	Change	Sales	High	Low	Change	Sales
American Airlines	53 1/4	50 1/4	-1 3/4	3,500	57 1/2	49 1/4	+5 1/2	9,700	63	54 1/4	+1 3/4	11,200
Aviation Corp.	5 3/4	5 1/4	-1/4	12,500	6	5	...	34,200	5 1/2	5	-1/4	19,900
Bendix Aviation	27 3/4	25	-2 3/4	11,300	30 1/4	25	-5 1/4	22,500	29 1/4	25	-4 1/4	11,100
Boeing Airplane	15 1/2	13 3/4	-1 3/4	25,200	15 3/4	12 3/4	-3 1/4	42,800	14 3/4	13 3/4	-1 1/4	22,600
Consolidated Aircraft	22 1/4	20	-2 1/4	4,700	23	17 3/4	+5 1/4	13,100	21 1/2	17 3/4	-3 1/4	6,800
Continental Motors	3 3/4	3	-3/4	18,000	3 3/4	2 1/2	-1 1/4	34,000	3 1/4	2 1/2	-1 1/4	19,500
Curtiss-Wright	8 3/4	7 3/4	-1	48,800	8 3/4	7 1/4	-1 1/4	111,900	8	7 1/4	-3/4	56,200
Curtiss-Wright A	25	23 1/2	-1 1/2	8,100	26 3/4	23	-3 3/4	20,300	25 3/4	23 3/4	-2	9,200
Douglas Aircraft	77	73 1/4	-3 3/4	6,500	81 3/4	72 1/4	+9 1/4	16,500	78 3/4	70	-8 3/4	14,200
Eastern Air Lines	29 1/4	26 1/4	-3 1/4	14,800	30 3/4	25 3/4	+5 1/4	24,800	32 1/2	28 1/4	+4 1/4	38,600
Ex-Cell-O	31 3/4	29 1/4	-2 1/4	6,000	33	28 3/4	+4 1/4	19,700	31 1/2	30	-1 1/2	7,100
Gruemann Aircraft Eng.	18	16	-2	7,400	18 3/4	15 3/4	-3 1/4	6,700	17 3/4	15 1/2	-2 1/4	4,200
Lockheed Aircraft	29 3/4	27 3/4	-2	23,500	30 1/4	25 1/4	-5 1/4	58,900	27 3/4	25 3/4	-2	31,900
Glenn L. Martin	33 3/4	31	-2 3/4	11,100	34 1/4	29 1/4	-5 1/4	28,200	30 1/2	27 3/4	-2 3/4	21,400
Natl. Aviation Corp.	10 3/4	9 3/4	-1	2,500	11 1/4	9	-2 1/4	4,500	10 1/2	9 3/4	-1 1/4	3,900
N. American Aviation	18 3/4	16 1/2	-2 1/4	19,400	19 1/4	16 1/4	-3 1/4	40,900	17 3/4	16 1/4	-1 1/4	24,000
Pan American Airways	13 3/4	12 1/2	-1 1/4	10,500	14 1/2	12	-2 1/2	16,800	13 3/4	12 3/4	-1 1/4	22,700
Sperry Corp.	39 1/4	37 1/4	-2	7,500	42 1/2	35 3/4	+6 1/2	17,600	40 3/4	37 3/4	-3	9,400
Thompson Products	28 3/4	27 1/2	-1 1/4	1,800	33 1/2	27 1/2	+6 1/4	4,100	33 1/2	30	-3 1/2	2,500
TWA	15 3/4	13 1/4	-2 1/4	7,700	16	13 1/2	-2 1/2	16,400	17 1/2	15 1/4	+1 3/4	9,400
United Aircraft	43 3/4	40 3/4	-3 1/4	16,100	44 3/4	39 3/4	-5 1/4	33,400	41 1/2	37 3/4	-4 1/4	27,700
United Air Lines	15 1/4	12 3/4	-2 1/4	12,700	15 1/2	12 3/4	-2 1/4	29,800	17 3/4	14 1/4	+3 1/4	36,200
Wright Aeronautical	...	...	...	...	103	91	-12	160	98	95	-3	30

NEW YORK CURB EXCHANGE

	Week Ended June 8				Week Ended June 15				Week Ended June 22			
	High	Low	Change	Sales	High	Low	Change	Sales	High	Low	Change	Sales
Aero Supply A	5 3/4	5	-1/4	2,200	5 3/4	4 3/4	+1 1/4	5,400	5 1/4	5 1/4	+3/4	4,800
Aero Supply B	11 1/4	11	+1/4	200	...	...	...	...	11 1/4	11 1/4	+3/4	400
Air Associates	2	2	...	400	2 1/4	2 1/4	+1/2	300	2 1/4	2 1/4	-1/4	300
Air Investors	3	2 3/4	-1/4	4,000	3 1/4	2 3/4	-1/2	8,200	2 3/4	2 3/4	-1/4	8,500
Aviation & Transp.	18 1/2	16 1/2	-2	1,700	18 1/2	15	-3 1/2	3,100	18 1/2	14 1/2	-4 1/2	1,900
Beech Aircraft	18 1/2	16 1/2	-2	2,300	18 1/2	15	-3 1/2	3,900	18 1/2	14 1/2	-4 1/2	3,700
Bell Aircraft	4 1/4	4 1/4	...	1,700	4 1/4	4 1/4	...	1,600	4 1/4	4 1/4	...	1,300
Bellanca Aircraft	5 1/4	4 3/4	-1/4	1,200	5 3/4	4 1/2	-1 1/2	2,400	5 1/4	4 1/2	-1 1/4	1,300
Breeze Corps	11 3/4	8 3/4	-3 1/4	20,500	11 3/4	9	-2 3/4	24,100	10 3/4	9	-1 3/4	13,500
Brewster Aero	7 3/4	6	-1 3/4	5,000	7 3/4	6	-1 3/4	3,800	7 3/4	6 3/4	-1 1/4	5,900
Canadian Colonial	9 1/2	8 1/2	-1	2,100	10 1/2	8 1/2	-2 1/2	2,300	9 3/4	9	-3/4	2,300
Fairchild Aviation	5 3/4	4 3/4	-1 1/4	8,000	5 3/4	4 3/4	-1 1/4	10,400	5	4 3/4	-1/4	10,900
Fairchild Eng. & Air	14 1/4	12 3/4	-1 1/4	900	15	12	-3 1/2	1,100	14 1/4	12 3/4	-1 1/4	1,300
Irving Air Chute	14 1/4	13	-1 1/4	1,800	15 1/4	12 1/2	-3 1/4	6,000	17	12 1/2	-4 1/2	4,300
Penn-Central Airlines	4 3/4	4 1/2	-1/4	6,900	5 1/4	4 1/4	-1 1/4	20,900	4 3/4	4 1/2	-1/4	9,200
Republic Aviation	...	...	...	...	2	1 3/4	-1/4	400	...	...	...	...
Roosevelt Field	...	...	...	...	2 3/4	3 1/2	+1 1/4	900	...	...	...	...
Waco Aircraft	4 1/4	4 1/4	...	200	4 3/4	4	-1/4	1,200	...	...	...	...
Western Air Express	...	...	...	...	...	...	...	...	...	...	...	...

Domestic Air Carrier Operations

(CAA Figures)

	March 1940				January through April		
	1940	1940	1939	% over April 1939	1940	1939	Percent of Increase over 1939
Companies operating	17	17	18	—	—	—	—
Companies reporting	17	17	18	—	—	—	—
Miles flown (revenue)	7,930,038	*8,331,759	6,267,595	32.93	30,205,965	22,876,619	32.04
Passengers (revenue)	178,332	*206,407	118,687	73.91	647,961	377,876	71.45
Passenger-miles (revenue)	73,047,662	*79,775,304	47,450,733	68.12	261,088,530	157,461,278	65.81
Express (pounds)	894,581	871,317	663,884	31.25	3,280,916	2,492,068	31.65
Express pound-miles	525,401,290	491,114,049	400,501,211	22.62	1,902,806,561	1,519,302,583	25.24
Available passenger seat-miles	123,232,597	*129,981,923	87,470,221	48.60	466,647,541	314,227,413	48.51
Revenue passenger load factor	59.28	61.37	54.25	—	55.95	50.11	—

* All time high.

Plant Expansion, Production

War Dept. Study Recommends Thirty New Aircraft Plants

3 Engine Factories Required to Build Up Production to 50,000

Although the majority of existing aircraft manufacturers are expanding plant space as rapidly as possible, 30 new aircraft plants and three new aircraft engine plants costing \$360,000,000 will be needed to build up production to 50,000 military planes yearly, according to a study submitted by the War Dept. to the House Appropriations Committee.

The aircraft plants would cost \$300,000,000, of which \$240,000,000 would be required for equipment and machine tools, engine plants \$60,000,000, with \$48,000,000 devoted to equipment and machine tools.

As a small beginning in this plant expansion program, the supplemental national defense appropriation bill provides the Secretary of War with \$200,000,000 (\$150,000,000 cash and \$50,000,000 in contract authority). This amount is in addition to the funds granted to the President for use in carrying out the national defense program.

Commenting on the study, Col. James H. Burns, executive officer to the Assistant Secretary of War, for industrial mobilization, emphasized that private industry is adequate to handle all production for which current appropriations provide, and that the \$200,000,000 is for the purpose of building plants that will take care of future needs.

In the meantime, private organizations in the aviation industry were stepping up production through ex-

panded plant space, employment and work schedules.

NA Sees Potential of 540 Units Monthly

Among these was North American Aviation Inc. at Inglewood, Cal. Approximately 140 military planes per month now roll off North American's 10 parallel production lines.

"This output is capable of tremendous expansion under the stepped-up program now under way," the announcement said. "Production potentialities have been estimated as high as 540 planes per month. Keeping pace with production, employment has increased from 5,000 in February to 6,500."

Although February additions to the NA plant brought production space to the total of 770,000 sq. ft., even further expansions now are under contemplation.

Allison to Occupy New Unit This Month

Allison Engineering Co., Indianapolis, Ind., will occupy a new factory unit this month. Additional construction is contemplated under the company's expansion program.

Douglas Employment Passes 18,000 Mark

With another thousand skilled workers added in the past month, employment has passed the 18,000 mark in Douglas Aircraft Co.'s Santa Monica and El Segundo, Cal., plants. It was learned recently. This is approximately one-fourth of all factory employees in America's aircraft manufacturing industry, according to tabulations of the Aeronautical Chamber of Commerce.

Payroll in a recent week exceeded \$550,000, an average of \$110,000 per working day, or nearly \$28,600,000 annually. Company's backlog now exceeds \$140,000,000. Maintaining pro-

duction around-the-clock in three eight-hour shifts the Santa Monica plant employs 13,583, El Segundo, 4,449.

Consair Will Have 1,910,000 Sq. Ft.

New buildings are taking form at the site of Consolidated Aircraft Corp., San Diego, Cal., which about Aug. 1 will become the largest integrated aircraft plant in America, the company has announced. New extensions will give Consair 1,910,000 sq. ft. of covered and uncovered manufacturing space.

Consolidated recently was reported to be seeking an eastern or middle western site for a branch factory to augment its San Diego plant. This disclosure was said to have been made by a company spokesman.

Ranger Rushes Addition Which Will Triple Space

Increase in plant facilities which will triple the floor space of Ranger Aircraft Engines Division of Fairchild Engine & Airplane Corp., Farmingdale, N. Y., is being rushed to completion and is expected to be ready for occupancy within two months.

The expanded facilities will be used for the production of a \$5,489,308 contract for engines recently received from the U. S. Navy. It is believed that receipt of this contract gives Ranger the fourth largest aircraft engine backlog in the U. S. Including the Navy order, Fairchild Engine & Airplane Corp.'s backlog is estimated at \$8,200,000.

Harlow Co. Installing Heavy Power Machines

Immediate installation of heavy power machinery to equip its Alhambra, Cal., plant for "war-time" production under the government's preparedness program was announced by Harlow Aircraft Co.'s president, J. B. Alexander. Now turning out all-metal private transports and trainers, Harlow is preparing to manufacture any types the War Dept. may assign to it.

Piper Aircraft Building Three Plant Additions

Piper Aircraft Corp., it has been reported, has engaged Hunting, Davis & Dunnelle, engineers, Pittsburgh, to construct three additions to its aircraft manufacturing plant at Lock Haven, Pa.

Beech Board Votes To Jump Production

Directors of Beech Aircraft Corp., Wichita, Kan., have voted to increase production substantially. In addition to doubling the corporation's real estate holdings by the purchase of a quarter section of land adjoining its present holdings of 160 acres, a large hangar and workshop with an area of 37,500 sq. ft. now standing on the newly purchased quarter section will be used to house increased production

New Aeronca Plant



Aerial view of the new aircraft factory of Aeronautical Corporation of America at Municipal Airport, Middletown, O.

facilities, and additional buildings will be erected immediately for an enlarged plating and anodizing department, and for larger stockroom space.

Taylorcraft Production Reaches All-Time High

With a record of orders for 22 planes in one day, Taylorcraft Aviation Corp., Alliance, O., has revealed that a 12% increase in shop personnel has been made and production lines are hitting an all-time high. Sales so far this year are 91% higher than in 1939, and the company is "giving from two to three weeks delivery on new orders. Within the past several weeks, many Taylorcrafts have been delivered to customers who canceled long standing orders with other companies," it was stated.

Cities File With ACCA

Cities seeking aircraft or engine plants on sub-contract facilities in connection with the national defense program are reporting information in their applications to the Aeronautical Chamber of Commerce in Washington where the data are on file for the use of ACCA members and those agencies of the government which are concerned with the industrial phase of the defense plan. All applications are being made through the ACCA.

Lycoming Property Comprises 15 Acres and 300,000 Sq. Ft.

Property of the Lycoming Div. of Aviation Manufacturing Corp. at Williamsport, Pa., now comprises a total area of over 15 acres of land with brick, concrete and steel buildings providing a manufacturing floor space of over 300,000 sq. ft., according to a company statement.

"With the addition of 200,000 sq. ft. of manufacturing space obtained when Aviation Manufacturing Corp. acquired the assets of the Lycoming Manufacturing Co. Jan. 1, the transfer of all New York offices of the Lycoming division to Williamsport, and the election of the new president, Harry Woodhead, this division began the greatest modernization and expansion program in the company's history," the statement said.

Negotiating for Lease

International Aircraft Trading Co. Inc., New York, is reported to be negotiating for a lease on 36½ acres of land on New York harbor, owned by Bayonne, N. J., city government, for erection of a plane plant. Frank M. Bellanca, brother of G. M. Bellanca, is president.

San Diego Scene

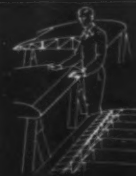


Consolidated Aircraft Corp. has announced it will have the largest integrated aircraft plant in America, with 1,910,000 sq. ft. of covered and uncovered manufacturing space and 954,440 sq. ft. of contiguous airport land under option for further expansion if necessary. Consair's backlog is over \$70,000,000 consisting mostly of U. S. government work with some foreign orders.

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C-W Centralizes Division Control

Curtiss-Wright Corp.'s St. Louis Division will be placed immediately under the direct supervision of Burdette S. Wright, vice-president of C-W and general manager of Curtiss Aeroplane Division at Buffalo, N. Y., according to Guy W. Vaughan, C-W president.

Vaughan stated that the reason for centralizing all aircraft production under one head was "to make available to St. Louis the production experience in building military aircraft, on a mass production basis, that the Buffalo plant has attained during the last 25 years."

P. N. Jansen, factory manager of the Buffalo division will supervise the expansion and direct the manufacturing program of the St. Louis division.

Charles W. France, C-W vice-president and for several years general manager of the St. Louis division, will continue as general manager under Wright.

Vaughan's announcement said "volume production is anticipated in the near future" on the new 36-passenger C-W transport recently completed at St. Louis.

Northrop's N3-PB Patrol Bomber Now In Final Mockup Form

Northrop Aircraft Inc.'s new N3-PB patrol bomber, originally ordered in a 24-unit lot by Norway, stands in completed mockup form, while parts already have been fabricated. Delivery of the craft will be made at Los Angeles Harbor, according to LaMotte T. Cohe, general manager.

Although Cohe would not speculate, it was believed that Norway will continue interest in the order, and that this single-engine, long-range double-pontooned craft will be flown by Norwegians in conjunction with British operations in Norway.

Latest specifications released by Northrop include: wingspan, 47 ft. 9 in.; overall length, 34 ft.; height, 9 ft. 9 in.; gross weight, 10,500 lbs.; powered by 1,100-hp. Wright Cyclone; cruising speed, as seaplane, 228 mph.; dive speed for bombardment uses, 296 mph.; landing speed, 72 mph.

Although its cruising range was not given, it was said the ship has an overload fuel capacity of 1,900 gal., a normal capacity of 1,500 gal. It will carry a three-man crew.

Armament includes one 20-mm. shell-firing cannon, two fixed wing guns, one flexible upper rear cockpit gun and a similar gun beneath the rear cockpit. It carries 1,200-1,800 lbs. of bombs. Stressed for a 2,800-hp. engine, the craft could fly better than 300 mph., it was learned.

Names S. A. Representatives
Vultee Aircraft Inc. has appointed the following South American representatives: Armando Capriles, Armando Capriles & Co., Apartado 265, Caracas, Venezuela; Gustavo A. Gonzalez, Air Mail Box 3598, Bogota, Colombia; Elmer J. Facuett, Hotel Bolivar 926, Lima, Peru; Raul Bessa, R. Casilla, 1782, Santiago, Chile; Tri American Aviation Inc., John K. Montgomery, president, Avenida Pte. Roque Saenz Pena 832, Buenos Aires, Argentina; Montelro, Aranha & Cia Ltd., Caixa Postal 1110, Rio de Janeiro, Brazil.

Bell Test Pilot

Brian O. Sparks recently was named chief test pilot of Bell Aircraft Corp., Buffalo, N. Y.

Production Manager



John J. Borrup

Has been appointed to the new post of production manager of Pratt & Whitney Aircraft Division of United Aircraft Corp. in a move designed to further increase engine production.

P&W Promotes 3 to Increase Output; Borrup to New Post

Appointment of John J. Borrup to the new post of production manager and promotion of G. H. D. Miller to be factory manager, and of Daniel Jack to be assistant factory manager, have been announced by H. M. Horner, general manager of Pratt & Whitney Aircraft Division.

Borrup will be responsible for supervising the production of P&W's sub-contractors, and coordinating this with its own production facilities. He has been associated with the United Aircraft division since its founding in 1925. As superintendent, and later as factory manager, he has been in charge of production of all P&W engines since the first Wasp. Previous to his association with the company, he was employed by Crane-Simplex Motor Co., Wright-Martin Co. and Wright Aeronautical Corp.



Miller

Miller, newly appointed factory manager who succeeds Borrup, has been assistant factory manager of P&W since 1935, and prior to this served as technical advisor to the Argentine government for two years. He was associated with Wright Aeronautical Corp. for seven years and with Curtiss Aeroplane and Motor Co. for nine years.

Jack, who succeeds Miller as assistant factory manager, started to work for the P&W division in Oct. 1925, two months after it was founded. He has been employed by several motor car and aircraft engine manufacturers.

Wichita Parts Co. Opens

Aero Parts Manufacturing Co., Wichita, Kan., occupying 7,000 sq. ft. of floor space, on June 10 began the manufacture of aircraft parts.

HALL JOINS BENNETT

Former Executive of Curtiss Airplane & Motor Co. Is New Vice President

James Goodwin Hall, who became assistant to the president of Curtiss

Airplane & Motor Co. in 1923, has been elected vice - president and chairman of the executive committee of Bennett Aircraft Corp., Ft. Worth, Tex. He entered the aviation section of the U. S. Army immediately after entry into the World War and was commissioned first lieutenant. Shortly before the armistice he was transferred as flight commander to the 163 U. S. Squadron. After returning from France he became an officer in the regular Army and was assigned to duty in the office of the chief of the Air Corps.

In 1928, on an exploration trip into the James Bay region of northern Canada, motor failure forced Hall to land on a mountain lake in the wilderness where he was not found until the seventh day.



Hall

Timm's Plastic Ship May Exceed Specs 10%

Tests of the Timm "aeromold" plastic airplane to date have indicated that design performance specifications, based on similar sized planes of metal and rivet construction, will be exceeded by about 10%. spokesmen for Timm Aircraft Corp., Van Nuys, Cal., said. This means that the top speed, originally slated at 140 mph., may go to 150 mph., and the cruising speed from 129 to 139 mph. with its 160-hp. Kinner engine.

R. A. Powell, vice president and general manager, said this about eventual production of the plastic craft: "Output of this ship is dependent solely on the number of jigs, molds and ovens (40 x 10 x 10 ft.) available. Potentially, one oven could handle three training ships per day." Powell added that mass production of the Timm plane would be spurred by the fact that it is built entirely of non-strategic materials—triple-laminated plywood being the basis of the plane and a phenol-formaldehyde derivative used at the "binder."

For the time being, at least, Timm will concentrate on the primary trainer and light sportplane field, it was indicated.

As testflown by Vance Breese, this is a 2050-lb. (gross) ship, with a 36-ft. span and 24-ft. 10 in. overall measurement. Its fabrication makes for a ship 20% lighter than a similar sized metal craft. It is resistant to heat of more than 1,400 degrees F.

Moulding Tank Ordered

A "super-size" moulding tank for so-called plastic airplanes and parts has been ordered for Duramold Aircraft Corp., a subsidiary of Fairchild Engine & Airplane Corp. The tank, 10 ft. in diameter and 28 ft. long, will be installed in the Grand Rapids plant of Haskelite Manufacturing Corp., co-owners of the Duramold process.

Sperry Consultant

Appointment of Col. Hugh Knerr, formerly of the Army Air Corps, as a special consultant to Sperry Gyroscope Co., was announced on June 15. He will act as consultant to the heads of the marine, aeronautical and other departments of the Sperry organization.



Young Executives

Research from the files of "American Aviation Directory" reveals that the average age of the presidents of twelve of the leading U. S. airlines is 38.54 years. Youngest of these is 29 years, oldest 49. In the manufacturing field, figures show that the average age of 20 presidents is 44.65 years, with the youngest 32 and oldest 59.

Jobs Open

The U. S. Civil Service Commission has announced examinations to fill aeronautical positions in the government. These are: (1) instructor, Air Corps Technical School, various grades with salaries ranging from \$2,000 to \$3,800 a year; (2) associate aeronautical inspector, \$3,500 a year, and assistant aeronautical inspector, \$3,200 a year, CAA; (3) aeronautical engineer, three grades, salaries ranging from \$2,600 to \$3,800, for professional engineering work in design, research, production or airworthiness regulation. Full information regarding examinations and proper application forms may be obtained from the Civil Service Commission, Washington, D. C.

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